OliBasic User Manual

OliBasic

Written by aFox

OliBasic version 3.00

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RFO-BASIC!

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1 Introduction

1.1 OliBasic

OliBasic is an Android interpreter for the Basic language, based on *RFO-BASIC!*, which is often referred to as *BASIC!* For purposes of generality, this document will often refer to *OliBasic* as *BASIC!*. Please note that *Basic* refers to the general definition of the language, while *BASIC!* refers to the specific implementations *RFO-BASIC!* and *OliBasic*.

1.2 Credits

Thanks to **Paul Laughton**, the original creator of RFO-BASIC! and its original documentation. The first edition was published in 2011. Mr. Laughton placed that document in the Public Domain in 2016.

Thanks also to **Mike Leavitt** for his many contributions and long-time support.

Thanks to long time RFO-BASIC! collaborator and forum contributor **Mougino** (**Nicolas Mougin)**, developer of the GW library and the Basic! compiler, who also developed the original cover art. Also for his code contributions to OliBasic.

Thanks to forum contributor **Spike** for relentless support and great documentation.

Thanks to forum contributor **aFox** (**Gregor**) for implementing OliBasic. Without aFox there would be no OliBasic.

Thanks to forum contributor **humpty** who graciously donated much of his hBasic code to OliBasic. Some of his donations are in the areas of GPS, Word_all$, Debug.dump.fn. Notify.status, Device$(), Globals.fnimp, Graphics, etc.

Thanks to forum contributor Tinine (Craig) for his support and proofreading abilities.

Thanks to forum contributor **tino1003870** (**Tino**) for his support and his BLE contributions.

And, of course, thanks to **George Boole**, who taught us the value of 0 and 1.

1.3 Disclaimer

OliBasic and all documentation are provided with no warranty. Although the authors will make an effort to ensure correctness, the software and documentation are provided "as is", with any faults, defects, bugs, and errors.

1.4 Documentation

This document, *OliBasic User Manual*, was developed from the original *De_Re_BASIC!* document and aFox's original OliBasic documentation. It is a companion to the *OliBasic Reference*, which was also developed from the original *De_Re_BASIC!* document.

This *OliBasic User Manual* and the *OliBasic Reference* were edited, and are maintained, by Robert A. Rioja.

The latest version of this document can be found at https://www.RvAdList.com.

1.5 References

OliBasic website:	https://olibasic.gitlab.io/About/index.html
BASIC! forum:	https://www.tapatalk.com/groups/rfobasic/
Spike's RFO-Basic! manual:	https://rfobasic.miraheze.org/
Mougino's website:	http://mougino.free.fr/
My website:	https://www.RvAdList.com

2 Permissions

This application requests many permissions, permissions such as sending and receiving SMS messages, making phone calls, record audio, etc. OliBasic does not exercise any of these permissions (except writing to files) on its own. These permissions get exercised by the OliBasic programmer, you. You and only you. You exercise these permissions by means of the programs that you write.

If you write a program that uses the **Sms.send** command then OliBasic will attempt to send an SMS message. OliBasic must have permission to send SMS messages for this command to work. If you never use the **Sms.send** command then OliBasic will never send an SMS message. You are in control.

3 Editor

The Editor is where programs are written and edited. The operation of the Editor is fairly simple. Tap the screen at the point where you want to edit the program. A cursor will appear. Use the keyboard to edit at the cursor location.

If the Preference, "Editor AutoIndent," is checked, then when the Enter key is tapped, the new line will automatically indent to the indent level of the previous line. Otherwise the new line will start at the leftmost position. The AutoIndent feature may not work if you are using a software keyboard.

If the program that you are editing has been given a name via Save or Load, then that program name will be shown in the title bar. Otherwise "unnamed program" will be shown.

Some Android devices are shipped with "Settings/Developer Option/Destroy Activities" checked and/or "Settings/Energy/Quick Restart" checked. Both of these setting create problems with loading files into the Editor. It appears as if you have gone through the process of loading the file but nothing appears in the editor. The solution to the problem is to uncheck both of these options. Even better, completely turn off Developer Options unless you know that you have a legitimate development need.

If your Android device does not have a physical keyboard, you will see a virtual keyboard. If you see the virtual keyboard, then you will see different things depending upon the way you are holding the device. If the device is in landscape mode then you will see a dialog box with a chunk of the program in a small text input area. You can scroll the small chunk of text up and down in this area but you will not be able to see very much of the program at any one time. It is probably best not to try to edit a program in landscape mode; hold your device in portrait mode while editing.

On some devices, if you do a long touch on the screen, a dialog box will appear. You can use the selections in the box for selecting, copying, cutting and pasting of text, among other things. Other devices have different procedures for invoking the cut and paste functions.

4 Menu

Press the MENU key or tap the Menu icon to access the following options. On some versions of Android, you will not see all of the menu options. Instead, you will see the first five options and a **More** option. Select the **More** option to see all of the options listed.

The MENU options are:

- [Sub Menu](#)
- [Run](#)
- [Load](#)
- [Load and Run](#)
- [Save](#)
- [Save and Run](#)
- [Clear](#)
- [Search](#)
- [Format](#)
- [Delete](#)
- [Start FTP Server](#)
- [Preferences](#)
- [Commands](#)
- [About](#)
- [Exit](#)

The options are described in the following sections.

4.1 Sub Menu

The Sub Menu contains less used options and some useful programs that are described in the following subsections.

4.1.1 Reload

Reload the program currently in the editor.

This is useful if you want to discard changes that you made to your program.

4.1.2 Reload and Run

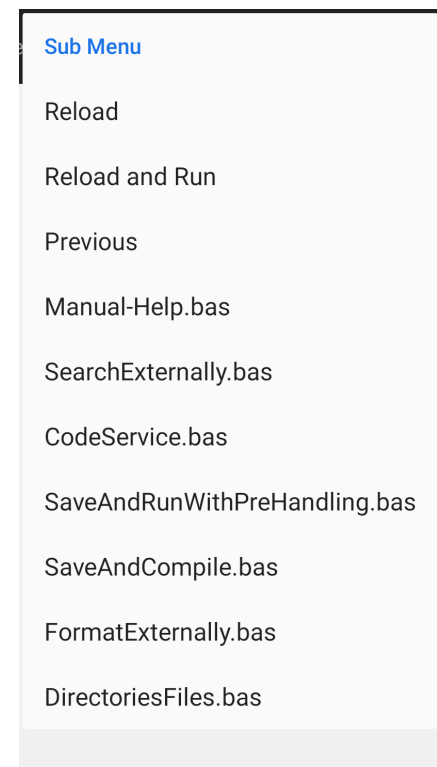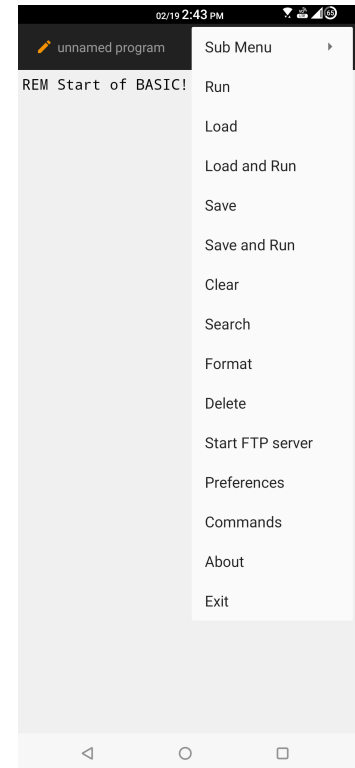Reload the program currently in the editor and run it.

This is useful if you want to run your program disregarding any changes that you made..

4.1.3 Previous

Load a program that you had previously edited.

A dialog will show the last 10 programs that you edited. Select one to load into the Editor.

4.1.4 Manual-Help.bas

4.1.5 SearchExternally.bas

4.1.6 CodeService.bas

4.1.7 SaveAndRunWithPreHandling.bas

4.1.8 SaveAndCompile.bas

4.1.9 FormatExternally.bas

4.1.10 DirectoryFiles.bas

4.2 Run

Run the current program.

If the program has been changed since it was last saved, you will be given an opportunity to save the program before the run is started.

If a run-time error occurs then the offending line will be shown as selected in the editor.

4.3 Load

Load a program file into the editor.

After installing OliBasic and running it for the first time, selecting **Load** will display the sample programs in the directory **rfo-basic/source/Sample_Programs**. (See **Paths Explained**, later in this manual.) Otherwise, running OliBasic and selecting **Load** will display the default source directory **rfo-basic/source**. Program files must have the extension **.bas**.

If you try to load a program while there is already a program in the Editor, OliBasic will check to see if the current program has been edited. If so, you will be asked to save the program. If you choose to do so, **Load** will start after the save is done.

After selecting **Load**, you will see the "BASIC! Load File" screen.   The first line shows the path to your current directory. The next line is used to select the sort order. From the third line on, you will see a sorted list of the directories and program files in the current directory.

By default, the directories and files are sorted alphabetically, and the second (sort order) line will show: "Change sorting to: Date reverse". Tapping this line will change the sort order to Date Reverse order. The second line will then display "Change sorting to: ABC...abc..." which allows you to revert to alphabetic order when desired.
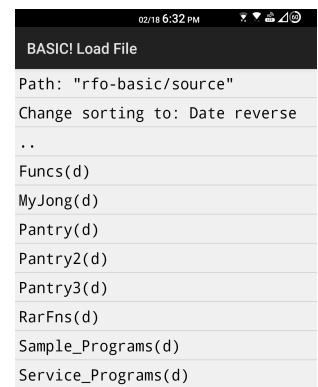
Directories are denoted by the **(d)** appended to the name. Programs are shown with the **.bas** extension. If there are files in the directory that do not have the **.bas** extension, they do not appear in the list.

Tap on a **.bas** file to load it into the Editor.

You can navigate to any directory on your device for which you have **read** permission.

- Tap a directory to display its contents.
- Tap the ".." at the top of list to move up one directory level. The tap has no effect if the current directory is the device root directory **"/"**.

You can exit the **Load** option without loading a program by tapping the BACK key.

OliBasic remembers the path to the directory you are in when you load a program. Next time you select **Load**, it starts in that directory. If you select **Save** or **Save and Run**, the file is saved in the remembered directory (unless it is Sample_Programs).

4.4 Load and Run

Load a program file into the editor and run it.

Selecting this option is exactly the same as first selecting **Load** and then selecting **Run**. The selected program is loaded into the Editor and is run immediately.

4.5 Save

Save the program currently in the editor.

A dialog box displays the path to the directory where you will save the file and an input area where you can enter the file name. If the current program has a name because it was previously loaded or saved, then that name will be in the text input area. Type in the name you want the file saved as and tap **OK**. The extension **.bas** will be added to file name if is not already there.

If you do not enter a file name, the default file name **default.bas** is used.

The path to the directory you were in when you last loaded or saved a program is remembered. When you **Save**, the file name you type is saved in the remembered directory. If the name you type includes subdirectories, the new path is remembered. The name you type can include **"../"**. Be careful if you are using a soft keyboard, as it may automatically insert spaces that you don't want.

You cannot save programs in the sample program directory **source/Sample_Programs**. If you **Load** a program from **source/Sample_Programs**, change it, and **Save** it, the program is saved in **source**.

You can exit **Save** without saving a file by tapping the BACK key.

4.6 Save and Run

Save the program currently in the editor and run it.

Selecting this option is a quick way to save and then run. Any changes you have made are saved, overwriting your file, and your program is run immediately. A brief popup notifies you that your file has been changed. If the program you are editing has no name (not previously loaded or saved), the Editor will ask you what name to use.

4.7 Clear

Clear the program currently in the Editor.

You will be offered the opportunity to save the current program if it has been changed.

4.8 Search

Search for strings in the program being edited. Found strings may be replaced with a different string.

The Search view shows a Text Window with the text from the Editor, a **Search For** field and a **Replace With** field.

If there is a block of text currently selected in the Editor, then that text will be placed into the **Search For** field.

The initial location of the search cursor will be at the start of the text regardless of where the cursor was in the Editor text.

Note that the search ignores case. For example, searching for "basic" will find "BASIC". This is because OliBasic converts the whole program to lower case (except characters within quotes) when the program is run.

The Search view also has buttons labeled

- NEXT
- DONE
- REPLACE
- REPLACE ALL

which are described in the following subsections.

4.8.1 NEXT Button

Start the search for the string in the **Search For** field. The search is started at the current cursor location. If the string is found then it will be selected in **Text Window**.

If the **Done** button is tapped at this point then the Editor will returned to with the found text selected.

If the **Replace** button is tapped then the selected text will be replaced.

Pressing the **Next** button again will start a new search starting at the end of the selected or replaced text.

If no matching text is found then a "string not found" message is shown. Tapping the **Done** button returns to the Editor with the cursor at the end of the program. Alternatively, you could change the **Search For** text and start a new search.

4.8.2 DONE Button

Returns to the Editor with the changed text. If there is selected text in the **Text Window** then that text will be shown selected in the Editor.

4.8.3 REPLACE Button

If **Next** has found and selected some text then that text is replaced by the contents of the **Replace With** field.

If no text has been found then the message, "Nothing found to replace" will be shown.

4.8.4 REPL. ALL Button

All occurrences of the **Search For** text are replaced with the **Replace With** text. **REPL. ALL** always starts at the start of the text. The last replaced item will be shown selected in the **Text Window**. The number of items replaced will be shown in a message.

4.8.5 BACK Key

Returns to the Editor with the original text unchanged. All changes made during the Search will be undone. Think of the BACK key as UNDO ALL.

4.9 Format

Format the program currently in the Editor.

The keywords are capitalized. Program lines are indented as appropriate for the program structure. Left- and right-double quotation marks (" and ") are replaced by simple ASCII quotation marks (").

When copying program text from the Forum or another web site, "non-breaking space" characters, designated ** ** in HTML, might have been inserted into the program text. Except when they are enclosed in quoted strings, **Format** converts these characters to simple ASCII spaces.

4.10 Delete

Delete files and directories.

The command can be used to delete files and directories that are used in OliBasic but it can also be used to delete any file or directory for which you have the required permissions. **Delete** starts in the OliBasic directory.

After selecting **Load**, you will see the "BASIC! Delete File" screen. The first line shows the path to your current directory. The next line is used to select the sort order. From the third line on, you will see a sorted list of the directories and program files in the current directory.

By default, the directories and files are sorted alphabetically, and the second (sort order) line will show: "Change sorting to: Date reverse". Tapping this line will change the sort order to Date Reverse order. The second line will then display "Change sorting to: ABC...abc..." which allows you to revert to alphabetic order when desired.

Directories are marked with **(d)** appended to the name and appear at the top of the list.

Tapping a file name displays the "Confirm Delete" dialog box. Tap the **Delete** button to delete the file. Tap the **No** button to dismiss the dialog box and not delete the file.

Tapping a directory name displays the contents of the directory. If the directory is empty the "Confirm Delete" dialog box is shown. Tap the **Delete** button to delete the directory. Tap the **No** button to dismiss the dialog box without deleting the directory.

Tap the **".."** at the top of the screen to move up one directory level. Tapping the **".."** has no effect if you are in the root directory **"/"**.

Exit **Delete** by tapping the BACK key.

4.11 Start/Stop FTP Server

Start or stop the OliBasic built-in FTP server.

If the FTP server is not already running, this Menu option will read **Start FTP Server**, otherwise it will read **Stop FTP Server**.

Currently, Android supports **scoped storage**.   This means that an app (like OliBasic) is expected to only access files that are "**local**" to its own directory, as assigned by Android. This prevents access to "**external**" files. Moreover, other apps cannot access OliBasic's internal files, since this would mean accessing files that are external to them. Usually this is not a problem, and it improves security. However, not being able to share files with other apps may sometimes be a nuisance. For example, scoped storage prevents you from sharing files with a PC for backup purposes, etc.

In order to overcome this problem OliBasic implements an FTP server. This allows another app, a PC, or anything else to use an FTP client to access all OliBasic files (source, data, databases, etc.).

After tapping **Start FTP Server**, the following will appear:

The last line shows the FTP address (192.168.1.123 for example) and port number (2121 for example).

Your FTP client should be set for:,

FTP Server of the OliBasic IDE

Server **Started**

192.168.1.123:2121

User: olibasic
Password: olibasic

OK

- FTP address: must match server (192.168.1.123 for example).
- FTP port: must match server (2121 for example).
- User Name: olibasic
- Password: olibasic
- Mode: passive or active (passive recommended)
- Type: unix
- Auth: plain text
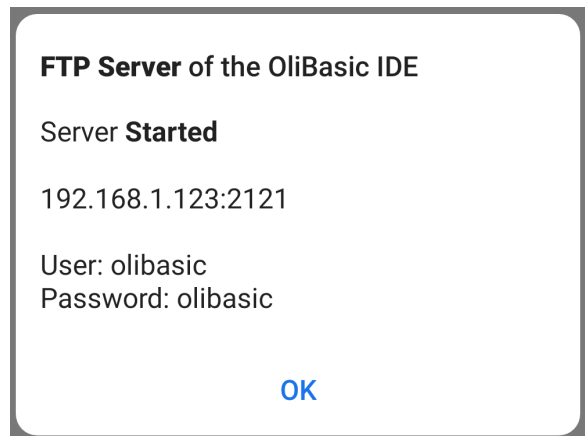
The root of the server starts at /Android/data/com.rfo.hbasic.

After tapping **Stop FTP Server**, the following will appear:

The server will be closed by any of the following:

FTP Server of the OliBasic IDE

Server **Stopped**

OK

- You tap **Stop FTP Server**.
- OliBasic is killed via the android recents list.
- Android removes it in the background.
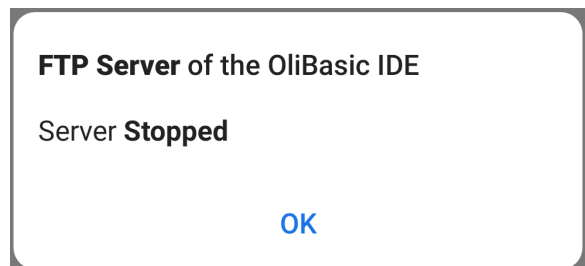
If OliBasic is exited, either by the Menu Exit option or an OliBasic command, the server will still be running. To stop it, you have to run OliBasic again and stop it via the **Stop FTP Server** option.

4.12 Preferences

The Preferences screen will appear with the following options

- Screen Colors
- Console Settings
- Editor Settings
- Menu Items On Action Bar
- Screen Orientation
- FTP Server Port
- Base Directory

which are described in the following subsections.

4.12.1 Screen Colors

Opens a sub-menu with options for setting the colors of the various screens in OliBasic.

4.12.1.1 Color Scheme

Sets the color scheme of the screens. The schemes are identified by their appearance with the default colors. Choose one of the following:

- Black Text On White Screen
- White Text On Black Screen
- White Text On Blue Screen

4.12.1.2 Custom Colors

Check the box to override the Color Scheme setting, allowing you to set your own colors. You can set the following options:

- Text Color
- Background Color
- Line Color
- Highlight Color

Each color is specified as a single number of 8 hexadecimal characters: four fields of two characters each for Alpha (opacity), Red, Green, and Blue components.

4.12.2 Console Settings

Opens a sub-menu with options for settings of the Console and various others screens in OliBasic.

4.12.2.1 Font Size

Sets the font size to be used with the various screens in OliBasic as follows:

- Small
- Medium
- Large

4.12.2.2 Typeface

Choose the typeface to be used on the Output Console and some other screens:

- Monospace
- Sans Serif
- Serif

4.12.2.3 Console Menu

Check the box if the Menu should be visible in the Output Console and TGet screen.

4.12.2.4 Console Lines

Check the box if the text lines in the Output Console should be underlined.

4.12.2.5 Empty Console Color

Choose the background color of the part of the Output Console that has not yet been written. It can match the background color of the text or the color of the lines separating text lines:

- Use text background color

- Use separator line color

This setting also applies to the **Select** (but not **Dialog.select**) command.

4.12.3 Editor Settings

Opens a sub-menu with options for setting properties and features of the Program Editor.

4.12.3.1 Editor Lines

Check the box if the text lines in the Editor should be underlined.

4.12.3.2 Editor Line Wrap

Check the box if long text lines in the Editor should wrap at the edge of the screen. If unchecked, long lines are not wrapped, and the Editor screen may be scrolled horizontally.

4.12.3.3 Editor AutoIndent

Check the box if you want the Editor to do auto indentation. Enabling auto indentation also enables the formatting of a line that ends with the "#" character.

Some devices are not able to do auto indenting properly. In some of those devices the AutoIndent feature may cause the Editor to be unusable. If that happens, turn off AutoIndent.

4.12.4 Menu Items On Action Bar

Opens a sub-menu with options for moving some of the Editor menu items to the Action Bar, if there is room for them there. You can select as many as you like, but the number of items moved depends on the device and orientation. These options have no effect on Android devices before Honeycomb (3.0).

4.12.4.1 RUN on action bar

If checked, the Editor will attempt to move the RUN item from the Menu to the Action Bar.

4.12.4.2 LOAD on action bar

If checked, the Editor will attempt to move the LOAD item from the Menu to the Action Bar.

4.12.4.3 SAVE on action bar

If checked, the Editor will attempt to move the SAVE item from the Menu to the Action Bar.

4.12.4.4 SAVE and RUN on action bar

If checked, the Editor will attempt to move the SAVE and RUN item from the Menu to the Action Bar.

4.12.4.5 CLEAR on action bar

If checked, the Editor will attempt to move the CLEAR item from the Menu to the Action Bar.

4.12.4.6 SEARCH on action bar

If checked, the Editor will attempt to move the SEARCH item from the Menu to the Action Bar.

4.12.4.7 FORMAT on action bar

If checked, the Editor will attempt to move the FORMAT item from the Menu to the Action Bar.

4.12.4.8 EXIT on action bar

If checked, the Editor will attempt to move the EXIT item from the Menu to the Action Bar.

4.12.4.9 SUB MENU ICON on action bar

If checked, the Editor will attempt to move the SUB MENU ICON item from the Menu to the Action Bar.

4.12.5 Screen Orientation

Choose to allow the Sensors to determine the orientation of the screens or to set a fixed orientation without regard to the Sensors:

- Variable By Sensors
- Fixed Landscape
- Fixed Reverse Landscape
- Fixed Portrait
- Fixed Reverse Portrait

Note: The reverse orientations apply to Android 2.3 or newer.

4.12.6 FTP Server Port

Opens a dialog where you can enter your preferred port number. Allowed numbers are from 2100 to 2999.

4.12.7 Base Directory

Opens a dialog where you can select to use Internal or External file access.

Currently, Android supports **scoped storage**.   This means that an app (like OliBasic) is expected to only access files that are "**local**" (**Internal**) to its own directory, as assigned by Android. This prevents access to "**External**" files. Moreover, other apps cannot access OliBasic's internal files, since this would mean accessing files that are external to them. Usually this is not a problem, and it improves security. However, not being able to share files with other apps may sometimes be a nuisance. For example, scoped storage prevents you from sharing files with a PC for backup purposes, etc.

The dialog allows you to choose scoped (internal) storage or external storage.

4.13 Commands

The Commands command presents the list of the OliBasic commands and functions.

Tapping an alpha key will cause the command list to scroll to commands that start with that character. There will be no scrolling if there is no command that starts with that character.

Note: You can hide the virtual keyboard with the BACK key. If you do that, you will not be able to get it back until you invoke the **Commands** option again.

Tapping on a particular command causes that command to be copied to the clipboard (not including the page number) and returning to the Editor. You can then paste the command into your program.

4.14 About

The About option displays the version of OliBasic that you are using, followed by a set of buttons that connect you to various websites with information about OliBasic. Make sure that you have a connection to the Internet before selecting one of the About buttons.

4.15 Exit

The only way to cleanly exit OliBasic is to use the **Exit** option.

Pressing the HOME key while in OliBasic leaves OliBasic in exactly the same state it was in when the

HOME key was tapped. If a program was running, it will still be running when OliBasic is re-entered. If you were in the process of deleting, the Delete screen will be shown when OliBasic is re-entered.

5 Running a Program

5.1 Run

Selecting Run from the Editor's menu starts the program running. However, if the source in the Editor has been changed, then the Save dialog will be displayed. You may choose to save the changed source or continue without saving.

The Output Console will be presented as soon as the program starts to run. You will not see anything on this screen unless one of the following situations occur:

- The program prints something.
- The **END** statement is executed.
- You are in Echo mode.
- There is a run-time error.

If the program does not print anything then the only indication you would get that the program has finished is if the program ends with an End statement.

If the program does not contain any executable statements then the message, "Nothing to execute" will be displayed.

Tapping the BACK key will stop a running program. Tapping the BACK key when the program run has ended will restart the Editor.

If the program ended with a run-time error, the line where the error occurred will be shown selected in the Editor. If the error occurred in an INCLUDE file then the INCLUDE statement will be shown selected.

The Editor cursor will remain where it was when the Run was started if no run-time error occurred.

5.2 Menu

Pressing the MENU key or tapping the Menu icon while a program is running, or after the program is stopped, will cause the Run Menu to be displayed. (Except when Graphics is running. See the Graphics section in the *OliBasic Reference Manual* for details.)

5.2.1 Stop

If a program is running, the Stop menu item will be enabled. Tapping Stop will stop the running program. Stop will not be enabled if a program is not running.

5.2.2 Editor

Editor will not be enabled if a program is running. If the program has stopped and Editor is thus enabled then selecting Editor will cause the Editor to be re-entered. You could also use the BACK key to do this.

6 An OliBasic Program

An OliBasic program is made up of lines of text. With a few exceptions that will be explained later, each line of text is one or more **statements**. If a line has more than one statement they are separated by colon (":") characters.

A statement always consists of a single command, usually followed by one or more parameters that are separated by commas. Here is a simple program:

```
Print "Hello, World!"
```

This program has one statement. The command is **Print**. It has one parameter, the string constant **"Hello, World!"**. A string constant, or string literal, is a set of characters enclosed in double quotation marks. This, too, will be explained later.

If you start OliBasic, so you are in the Editor, you can type in this one-line program. Then you can select Run from the Editor's menu and your program will be run. When the program is done running, you see the Console, the output screen, with **Hello, World!** printed at the top.

7 Sample Programs

The programs are loaded into "<pref base drive>/rfo-basic/source/Sample_Programs" when a new release of OliBasic is installed. You can access them by selecting **Menu→Load**. Tap the "Sample_Programs" line. The sample programs will be listed and can be loaded.

If you load and save one of these programs, the program will be saved in "<pref base drive>/rfo-basic/source/" not in "<pref base drive>/rfo-basic/source/Sample_Programs".

You can force OliBasic to re-load these programs by:

- Select Menu→Delete
- Navigate to "rfo-basic/source/Sample_Programs/"
- Delete the "f01_vxx.xx_read_me file"
- Exit OliBasic using **Menu→Exit** or **Menu→More→Exit.**

8 Launcher Shortcut Tutorial

8.1 Introduction

This tutorial will "compile" an OliBasic program and create an "application" that resides on your Android device home page. This "application" will have its own Icon and Name. The official Android name for this type of "application" is "Shortcut." The OliBasic application must be installed for this to work.

8.2 How to Make a Shortcut Application

The following instructions may vary depending on the version of Android that you are using.

1. Depending on your Android version, select the Apps Page or touch and hold your home screen.
2. Look for the Widgets screen and access it.
3. Scroll until you see the OliBasic icon that says Launcher Shortcuts.
4. Touch and hold that entry, then drag it to your home page.
5. The Laucher Shortcuts screen shown on the right will appear.
6. Fill out the Form exactly as shown. For example:
   • Program File Name: Sample_Programs/f13_animations.bas.
   • Icon File Name: cartman.png.
   • Shortcut Name: Cartman.
7. Tap OK.

You should see something like this on your HOME screen.

If you tap the Cartman shortcut, OliBasic will start and run the Cartman Jumping Demo.

8.3 What you need to know

• The icon image file must be located in the "<pref base drive>/rfo-basic/data/" directory.
• The program that you are going to run must be in the "source" directory or one of its subdirectories. In this example, the file was located in the Sample_Programs(d) subdirectory of the "source(d)" directory.
• The icon should be a .png file. A Google search for "icon" will reveal thousands for free icons. Just copy your icon into the "rfo-basic/data" directory.

- Be very careful to correctly spell the names of the program and icon files. OliBasic does not check to see if these files actually exist during the "compile" process. If you enter the name of an icon file that does not exist, your shortcut will have the generic Android icon. If the file name you specified does not exist, when you tap the Shortcut you will see an error message in the form of program file in the Editor.
- The Shortcut name should be nine (9) characters or less. Android will not show more than nine characters.
- You can create as many shortcuts as you home screen(s) can handle.
- Tapping "Cancel" in the Launcher Shortcuts dialog will simply cancel the operation and return to the home screen.
- If you plan to use an OliBasic Launcher Shortcut, you should always exit OliBasic using **Exit→Menu** or **Menu→More→Exit**. If a Launched program is running, tapping BACK once or twice will exit OliBasic back to the Home Screen.
- Your program can tell if it was launched via a shortcut by using the **Program.info** command (see OliBasic Reference).

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