

Supplement II.A: Creating, Compiling, and Running Java Programs from TextPad

For Introduction to Java Programming
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This supplement covers the following topics:

- Introducing TextPad UI
- Creating a Java Program
- Compiling a Java Program
- Running a Java Program
- Creating and Running a Java Applet

1 Introduction

TextPad is a shareware Java IDE. It provides editing, compiling, and running Java programs from a single user interface. It is a simple tool for novice users to develop Java programs. You can also download it from www.textpad.com. You need to install JDK before installing TextPad. JDK 1.5 can be downloaded from <http://java.sun.com/j2se/1.5/download.html>.

Assume you have successfully installed JDK 1.5 and TextPad. Start TextPad. The main user interface appears as shown in Figure 1.

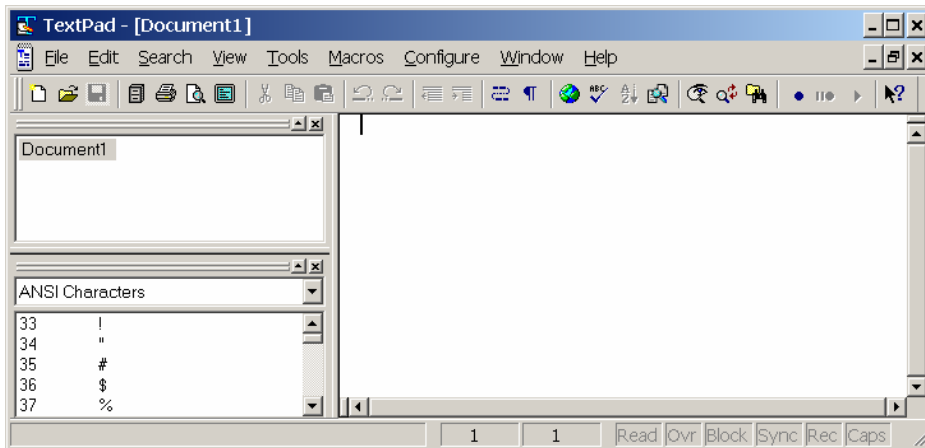


Figure 1

The TextPad main window is the command center for the IDE.

The TextPad main window contains menus, toolbars, file pane,


editor pane, and reference pane.

1.1 The Main Menu

The main menu is similar to that of other Windows applications and provides most of the commands you need to use TextPad, including those for creating, editing, compiling, and running. The menu items are enabled and disabled in response to the current context.

1.2 The Toolbar

The toolbar provides buttons for several frequently used commands on the menu bar. The toolbars are enabled and disabled in response to the current context. Clicking a toolbar is faster than using the menu bar. For many commands, you also can use function keys or keyboard shortcuts. For example, you can save a file in three ways:

- Select File, Save from the menu bar.
- Click the "save" toolbar button
().
- Use the keyboard shortcut Ctrl+S.

TIP:

You can display a label known as *ToolTip* for a toolbar button by pointing the mouse to the button without clicking.

1.3 The File Pane

The file pane displays all files currently opened in TextPad.

1.4 The Editor Pane

The file pane displays the content of the file selected in the file pane.

1.5 The Reference Pane

The reference pane gives the user a quick reference on ANSI Characters, Control Characters, DOS Characters, HTML Characters, and HTML tags.

2 Creating a Java Program

Let us use Example 1.1 and Example 1.2 demonstrate creating a Java program from TextPad.

Every time you start TextPad, a blank document named

Document1 appears as shown in Figure 1. You can type in the following code in the editor pane as shown in Figure 2.

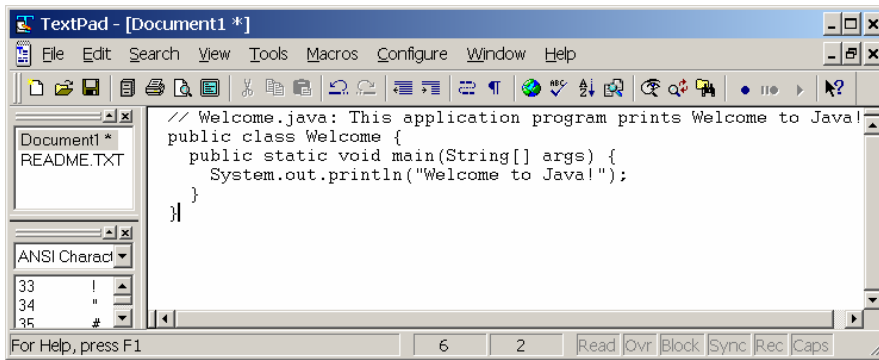


Figure 2

You can type the source code in the editor pane.

Choose *File, Save as* to display the Save As dialog box as shown in Figure 3. Type *Welcome* in the File name field and select *Java* in the Save as type field. Choose a folder where you want the file to be saved and click *Save* to save the file. You will see the file name *Welcome.java* now appears in the file pane, as shown in Figure 4.

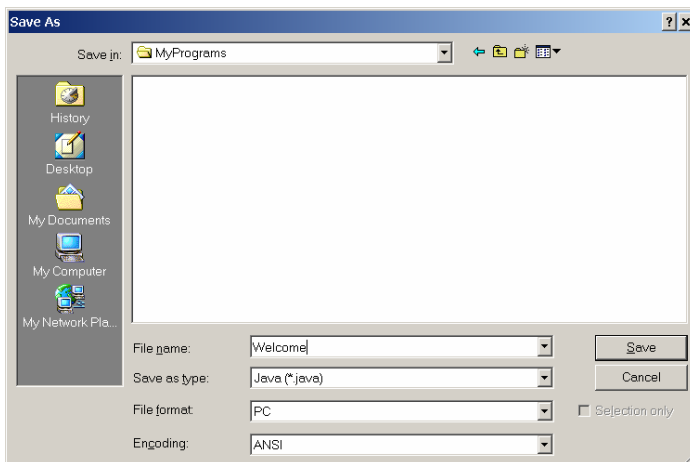


Figure 3

You can save the source code into .java file.

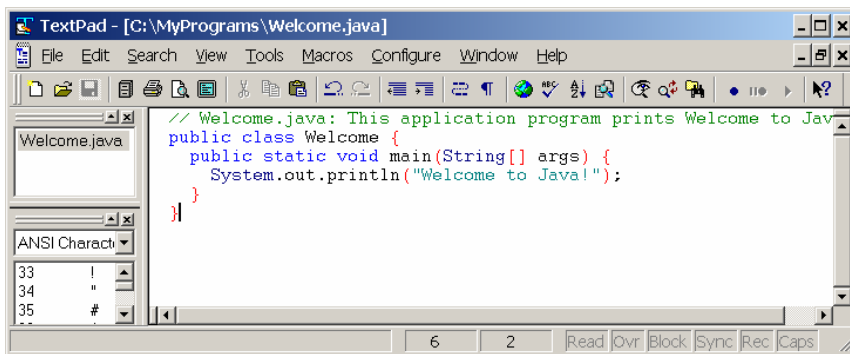


Figure 4

You can save the source code into .java file.

To create a new Java source code file for Example 1.2, choose *File, New*. Document2 appears in the file pane. Type the code for Example 1.2 in the editor pane as shown in Figure 5. Choose *File, Save As* to save the file as a .java file named `WelcomeInMessageBox`, as shown in Figure 5.

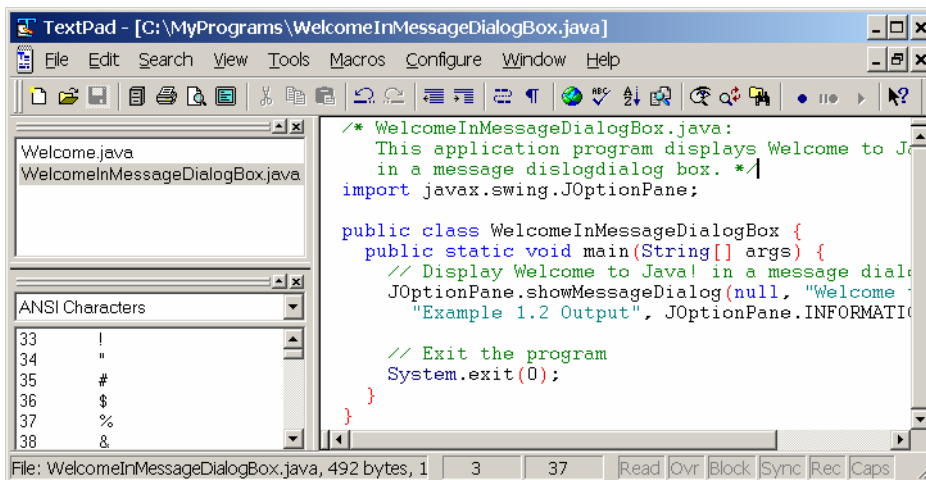


Figure 5

A new file is created for `WelcomeInMessageBox.java`.

3 Compiling a Java Program

To compile `Welcome.java`, select `Welcome.java` in the file pane, choose *Tools, Compile Java*.

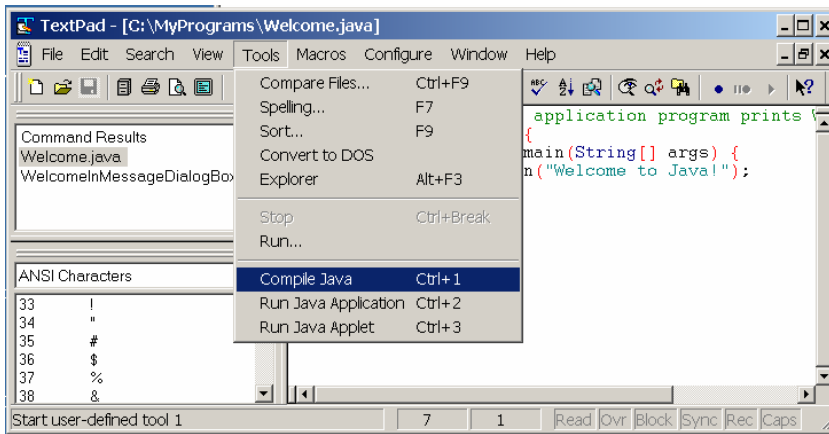


Figure 6

You can compile Java programs from the TextPad.

4 Running a Java Program

To run `Welcome.java`, select `Welcome.java` in the file pane, choose *Tools*, *Run Java Application*. A DOS command prompt is started to display the output from the print statement, as shown in Figure 7.

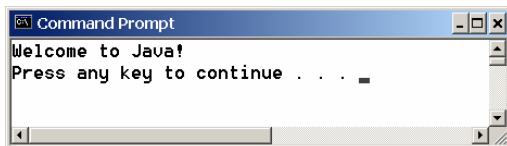


Figure 7

You can run Java programs from the TextPad.

5 Creating and Running a Java Applet

Let us use Example 12.1 demonstrate creating and running Java applets. You can create a `MortgageApplet.java` in the same way you create a Java program. To create `MortgageApplet.html`, choose *File*, *New* to create a file and save it as `.htm` file, as shown in Figure 8.

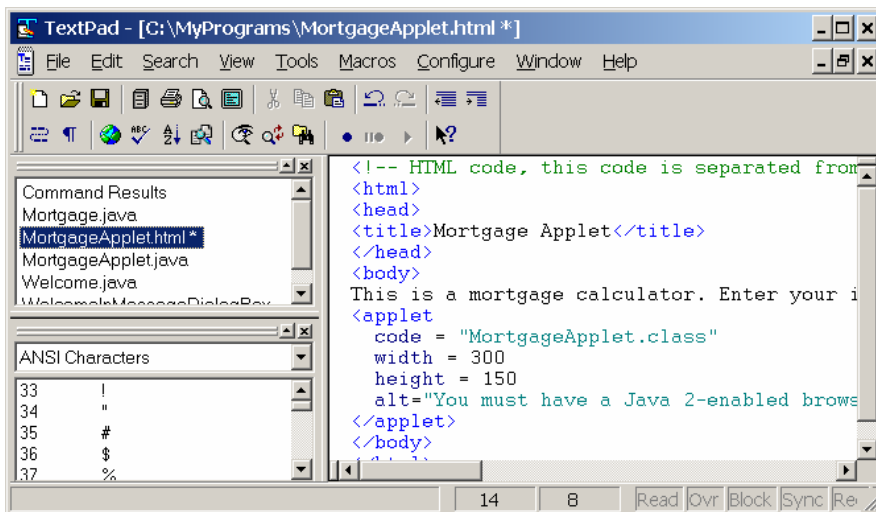


Figure 8

You can create HTML files from the TextPad.

Compile all the classes required for the applet. Run the applet by choosing *Tools, Run Java Applet*.