

EXPERIMENT NO.-06

AIM: Edit, compile, execute and test a Java program that uses Strings.

Strings in Java

Strings in Java are Objects that are backed internally by a char array. Since arrays are immutable (cannot grow), Strings are immutable as well. Whenever a change to a String is made, an entirely new String is created.

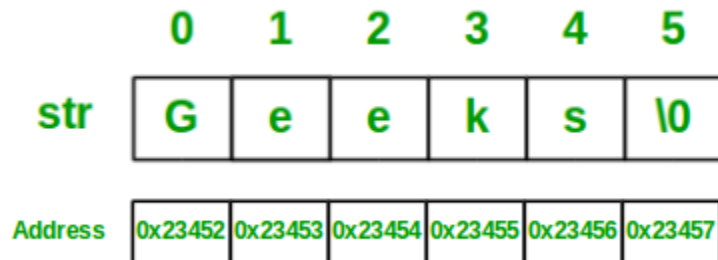
Below is the basic syntax for declaring a string in **Java programming** language.

Syntax:

```
<String_Type> <string_variable> = "<sequence_of_string>";
```

Example:

```
String str = "Geeks";
```

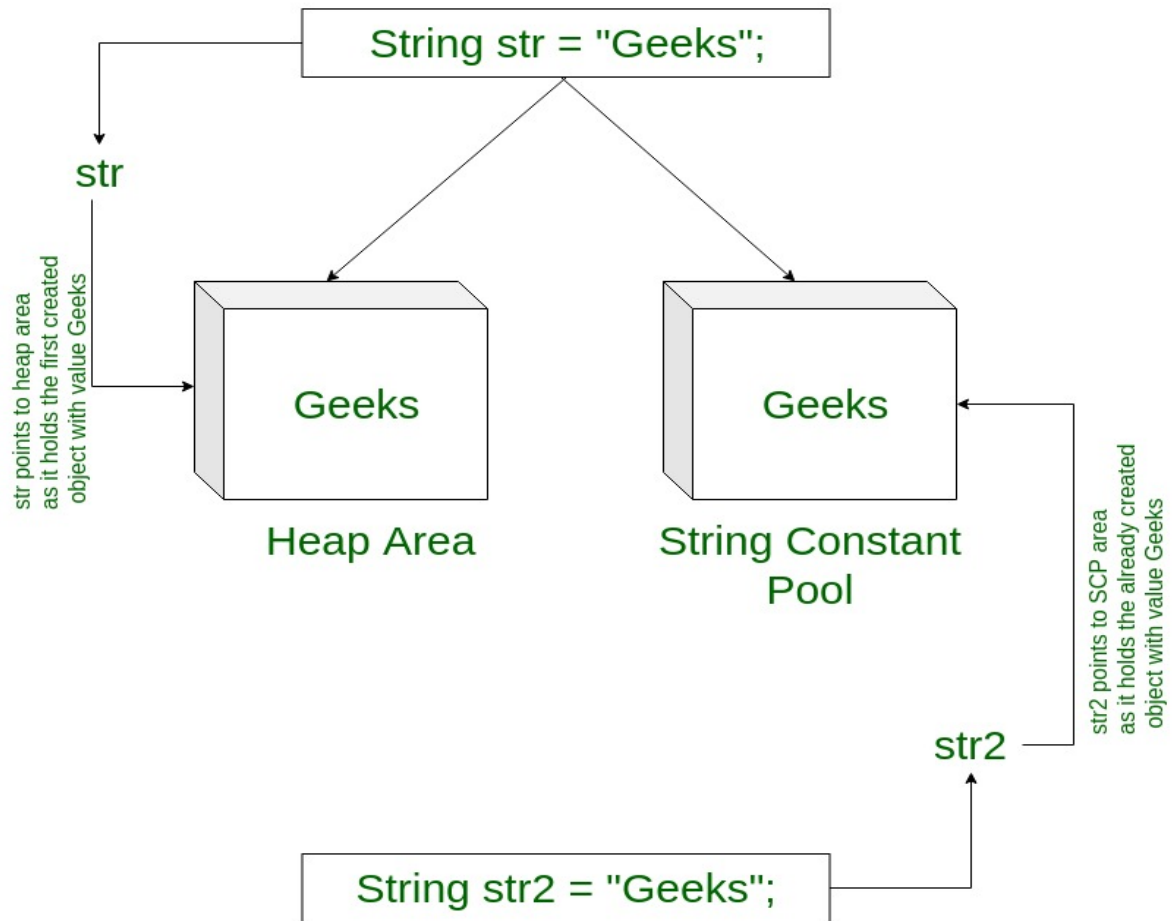


Memory allotment of String

Whenever a String Object is created, two objects will be created- one in the Heap Area and one in the String constant pool and the String object reference always points to heap area object.

For example:

```
String str = "Geeks";
```



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THOERY:

Hello World: How to Create Your First Java Program

You need the following 2 software to create your first Java Program

1. The Java SE Development Kit

Please refer our last tutorial to [download and install JDK](#)

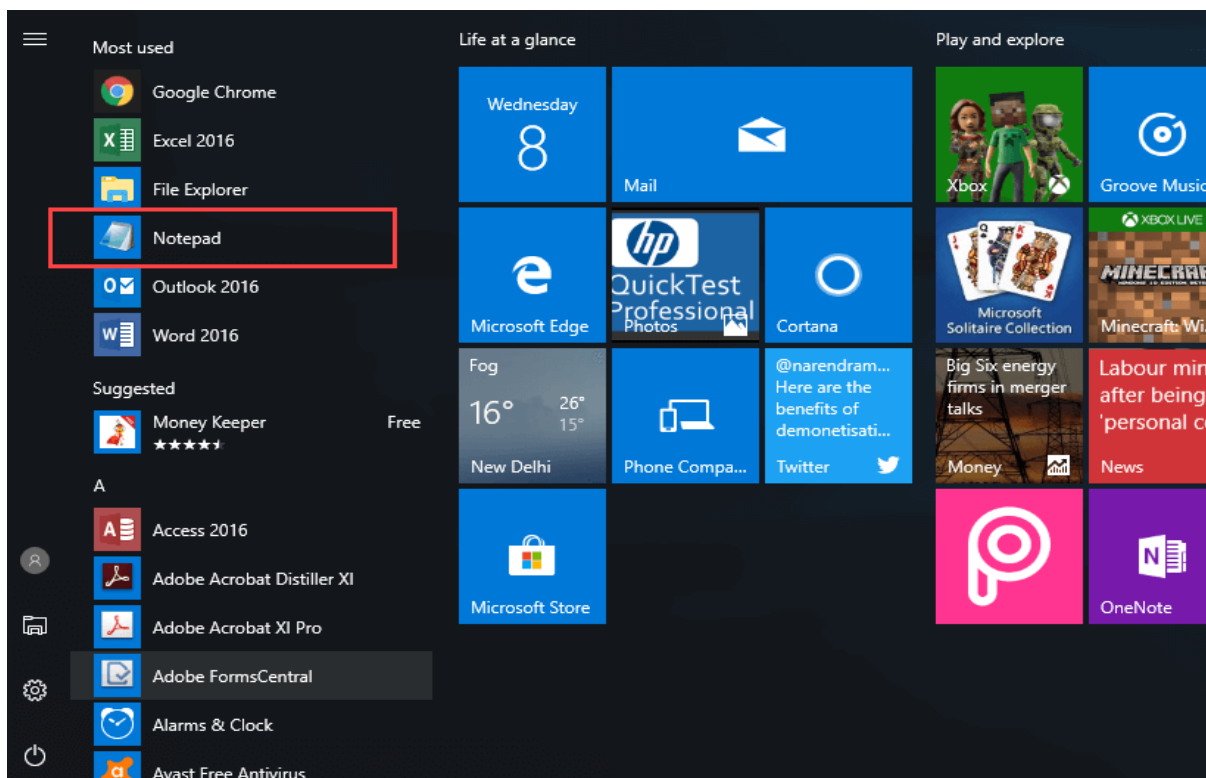
2. A Text Editor

In this example, we'll use Notepad. it is a simple editor included with the Windows Operating System. You can use a different text editor like NotePad++

This video will help you code your first Java program.

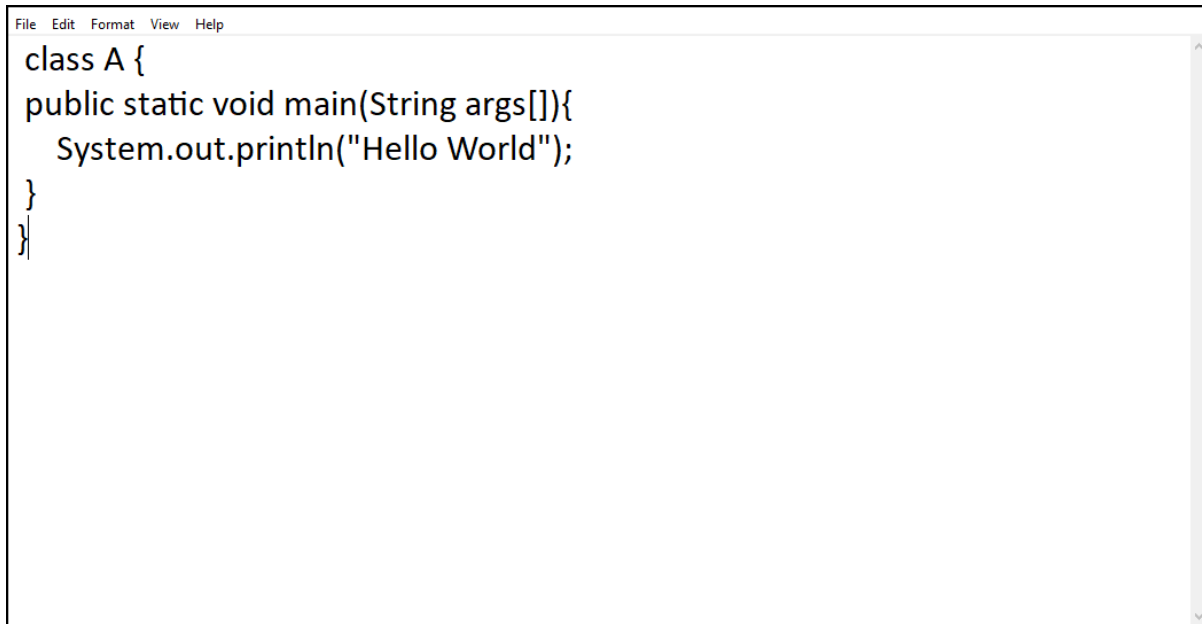
Steps to Compile and Run first Java program

Step 1) Open Notepad from Start menu by selecting Programs > Accessories > Notepad.



Step 2) Create a Source Code for your Program

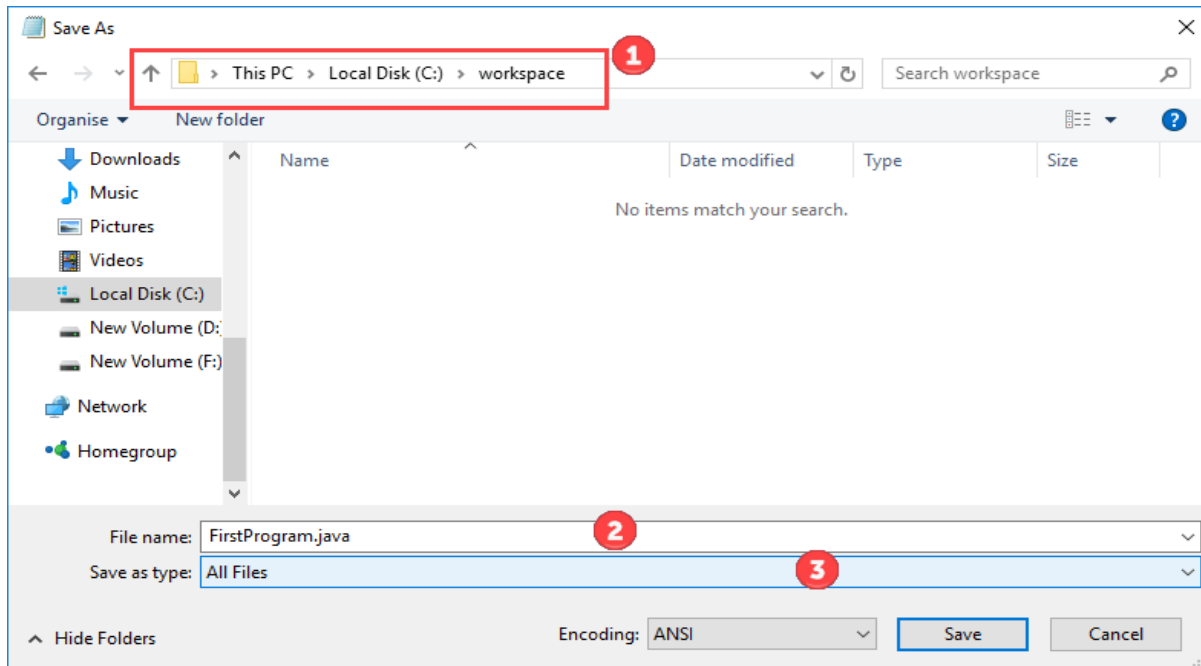
- Declare a class with name A.
- Declare the main method **public static void main(String args[]){**
- Now Type the **System.out.println("Hello World");** which displays the text Hello World.

A screenshot of a Java IDE window. The title bar shows 'File Edit Format View Help'. The code editor contains the following Java code:

```
class A {  
    public static void main(String args[]){  
        System.out.println("Hello World");  
    }  
}
```

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class A {  
    public static void main(String args[]){  
        System.out.println("Hello World");  
    }  
}
```

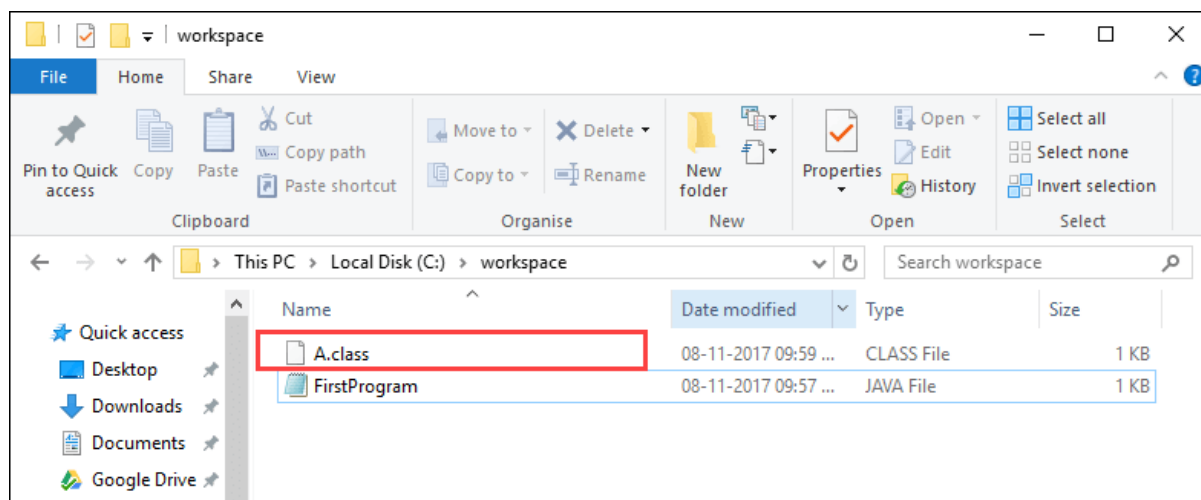
Step 3) Save the file as **FirstProgram.java** make sure to select file type as all files while saving the file in our working folder **C:\workspace**



Step 4) Open the command prompt. Go to Directory **C:\workspace**. Compile the code using command,

```
javac FirstProgram.java
```

Step 5) If you look in your working folder, you can see that a file named **A.class** has been created.



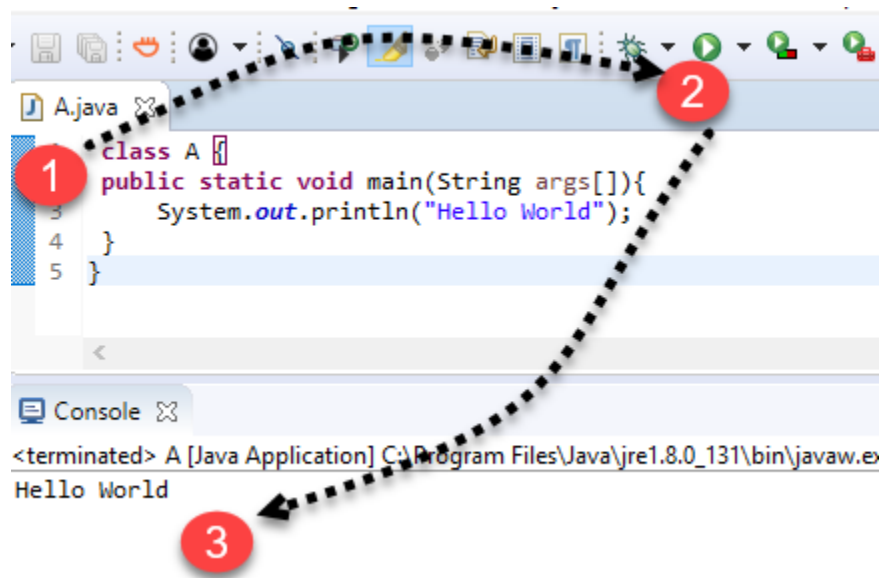
Step 6) To execute the code, enter the command `java` followed by the class name, as expected output **Hello World** is displayed now.

java A

```
C:\workspace>java A
Hello World
C:\workspace>
```

Note: Java is case sensitive Programming language. All code, commands, and file names should be used in consistent casing. **FirstProgram** is not same as **firstprogram**.

Step 7) If you copy and paste the same code in IDE like Eclipse the compiling and execution is done with the click of a button Using IDE is convenient and improves your efficiency but since you are learning Java, we recommend you stick to notepad.



CONCLUSION: Thus, we have successfully studied about editing, compiling, executing and testing a Java program that uses Strings.