

CORE JAVA

UNIT I

Take Home Task Solution

Find different tools available in JDK. Also note down their functionality.

appletviewer	Enables us to run Java applet.
jdb	Java debugger, which helps us to find errors in our programs.
javadoc	Creates HTML format documentation from Java source code
javah	Produces header files for use with native methods
javap	Java disassembler, which enables us to covert bytecode files into a program description.
jar	specifies the archiver, which packages related class libraries into a single JAR file.
javac	Java compiler, which translates java source code to bytecode files that the interpreter can understand
java	Java interpreter, which runs applets and applications by reading and interpreting bytecode files.



LEARNING OUTCOMES

UNDERSTANDING THE BASIC STRUCTURE AND MEANING
OF SOME IMPORTANT METHODS IN JAVA

Simple structure

Example.java

class Example

{

public static void main(String args[])

- //LINES OF CODE

}



The name you give to a source file is very important.



The Java compiler requires that a source file use the .java filename extension.



The name of the class defined by the program should be the same as that of the source file.



Java is Case Sensitive.

Important Points to remember

To compile the java program, execute the compiler, javac, followed by the name of the source file.

```
C:\>javac Example.java
```

The javac compiler creates a file called Example.class that contains the bytecode version of the program.

The Java bytecode is the intermediate representation of your program that contains instructions the Java Virtual Machine will execute.

Thus, the output of javac is not code that can be directly executed.

COMPILING THE JAVA PROGRAM

EXECUTING THE JAVA PROGRAM



To actually run the program, you must use the Java application launcher, called `java`.



`C:\>java Example`

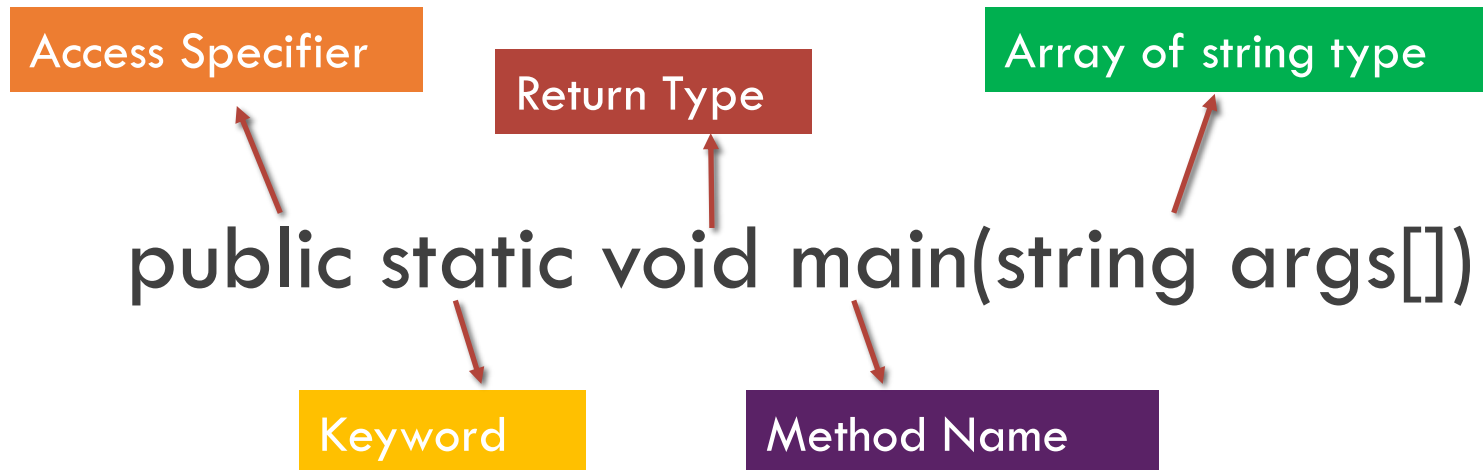


When Java source code is compiled, each individual class is put into its own output file named after the class and using the `.class` extension.



It will automatically search for a file by that name that has the `.class` extension.

Main Method



Public:

Use a public keyword before the main() method so that JVM can identify the execution point of the program.

Static:

We should call the main() method without creating an object.

Void:

Void keyword acknowledges the compiler that main() method does not return any value.

Reason behind using the keywords

Main:

It is a default signature which is predefined in the JVM. It is called by JVM to execute a program line by line and end the execution after completion of this method.

String args[]:

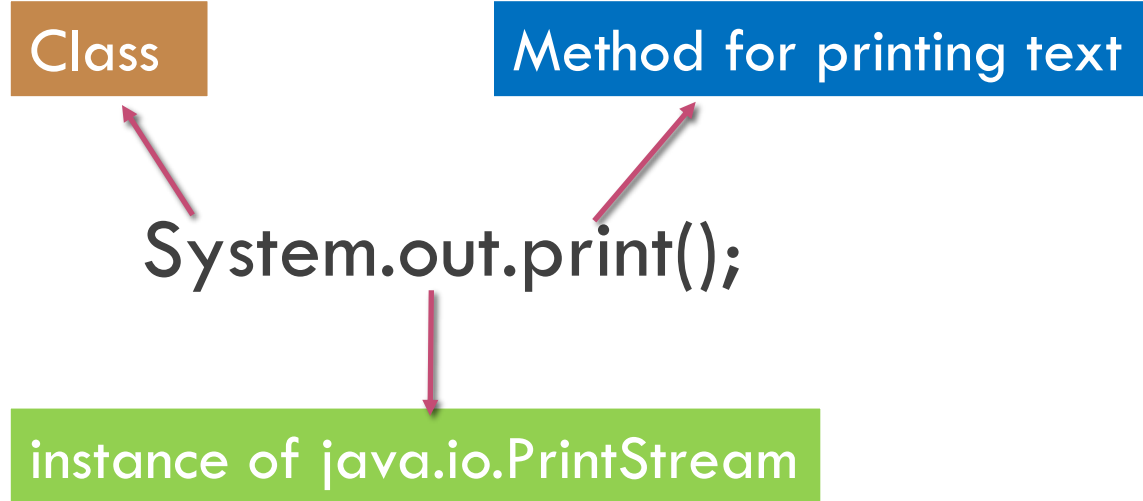
The main() method also accepts some data from the user. It accepts a group of strings, which is called a string array. It is used to hold the command line arguments in the form of string values.

Reason behind using the keywords

Simple program

```
class Example  
{  
    public static void main(String args[])  
    {  
        System.out.print("The same old!!! HELLO WORLD!!!");  
    }  
}
```

Simple program



FILL IN THE BLANKS

The main method in java is declared with public access specifier .

javac is used to compile a java program.

Once compiled a class file is created which helps execute the program.

To execute a program java command is used.

TAKE HOME TASK

FIND DIFFERENT
FORMATTING STRING
FOR PRINTF()
METHOD.

Thank
you

