

## Java Hello World Program

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

1. *Create* the program by typing it into a text editor and save it to a file named HelloWorld.java.
2. *Compile* it by typing "javac HelloWorld.java" in the terminal window.
3. *Run* (or *execute*) it by typing "java HelloWorld" in the terminal window.

```
class Demo{  
    //program always begins with main()  
    public static void main(String[] bhabani){  
        System.out.println("hello world");  
    }  
}
```

### EXPLANATION:

- every program in java must have a class. The methods and variables must be inside the class.
- Demo is an identifier that is the name of the class.
- // -This is the comment. JVM ignores the line
- Every program execution begins with the main(). It takes an argument array of strings. The main method is Public because it is called by JVM which exist outside the class. If you did not specify public then it will generate a compilation error.
- A program can have two main().  
like public static void main(String[] args) and void main(int x){}  
The other main() is just like normal methods.
- main() is static because main() is independent of any instance of the class. It is executed before any instance present. The program execution starts from main().  
All the console based programs have a main(). Applets do not have a main().
- return type of main() is void because it returns nothing.
- system is the pre defined class that provides access to the system. out is the output stream that is connected to the console and println() is a predefined method. If main() is declared as private --- The program compiles properly but at runtime it will give "Main method not public." message.

What if the static modifier is removed from the signature of the main method? or do not provide the String array as the argument to the method? Result for above : Program compiles. But at runtime throws an error