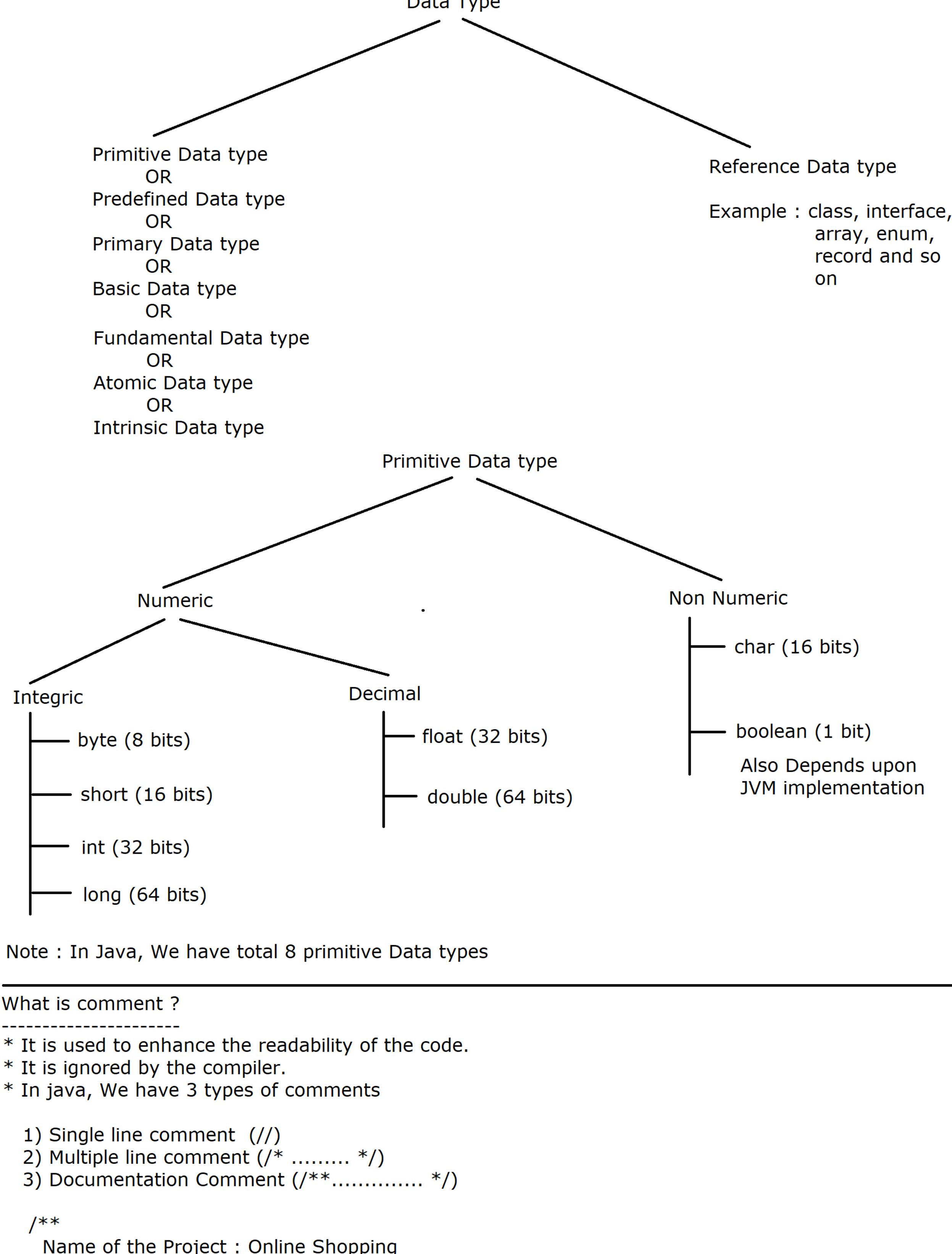


Data types in java ?

* A data type describes, what kind of value we can assign to a variable. In Java, Data types are divided into two categories :

- 1) Primitive Data type
- 2) Reference Data type



Note : In Java, We have total 8 primitive Data types

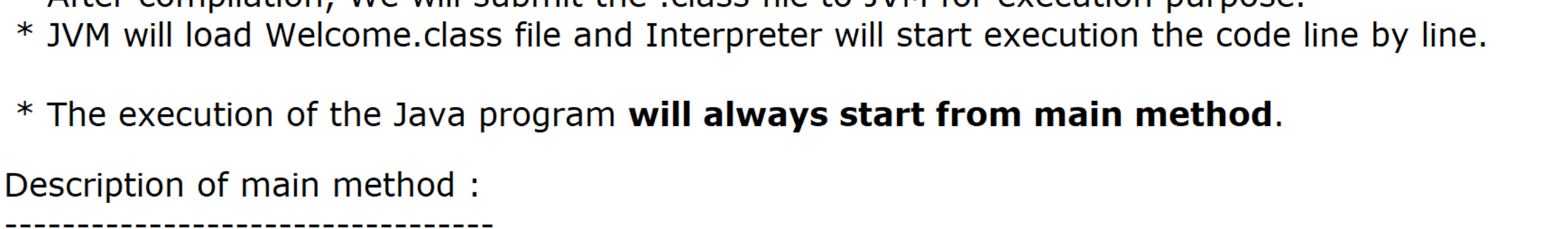
What is comment ?

- * It is used to enhance the readability of the code.
- * It is ignored by the compiler.
- * In java, We have 3 types of comments

- 1) Single line comment (//)
- 2) Multiple line comment (/* */)
- 3) Documentation Comment (/**..... */)

```
/**
Name of the Project : Online Shopping
Total Modules : 82
Date of Creation : 23rd DEC 2019
Last Modification : 17th April 2025
Author : James Gosling and his team members
*/
```

WAP in Java to display welcome message :



- * After compilation, We will submit the .class file to JVM for execution purpose.
- * JVM will load Welcome.class file and Interpreter will start execution the code line by line.

* The execution of the Java program **will always start from main method.**

Description of main method :

public :

- * It is an access modifier in java which defines the accessibility level. The main method must be declared as public otherwise JVM **cannot execute OR access** the main method.
- * If we don't declare the main method with public access modifier then **code will compile** but It will not be executed by JVM because JVM cannot access the main method.

static :

* As of now, In Java we have only 2 types of methods

- 1) Non static method (Object is required)
- 2) Static Method (Object is not required)

static Method :

- * In order to call static method, **Object is not required**
- * A static method we can call by using two ways :

- 1) If the static method is available in the same class where we have main method then we can directly call the static method with the help method name as shown below :

```
//Calling static method directly
public class Welcome
{
    public static void main(String[] args)
    {
        System.out.println("Hello Batch 46");
        greet();
    }

    public static void greet() //static method
    {
        System.out.println("Hello Everyone");
    }
}
```

- 2) If a static method is available in another class then to call the static method class name is required (We cannot call directly) as shown below

```
//Calling the static method available in another class (Sample class)
public class StaticTest
{
    public static void main(String[] args)
    {
        System.out.println("Hello Batch 46");
        Sample.greet();
    }
}
```

```
class Sample
{
    public static void greet()
    {
        System.out.println("Hello Everyone!!!!");
    }
}
```

* in order to call the main method, JVM uses class name, given by java compiler because main method is a **static method.**

* If we don't declare main method as a static method then code will compile but it will not be executed by JVM, saying that main method is not static

void :

- * It is a keyword in java.
- * We should use void keyword before the user-defined method name, If we don't want to return any kind of value from that particular method.

* **Without return type we cannot define any method in java. It is a syntax rule.**