What is a command line argument ?

```
public static void main(String [] args)
{

}
```
→ Parameter variable

* If we pass some arguments to the main method **at runtime then it is called Command Line argument.**
* By using command line arguments, We can pass some value at runtime.
* The advantage of command line argument is : **"Single time compilation and number of times execution"**

Example :

```
Command.java                          public class Command
    ↓                                 {
  javac                                   public static void main(String [] args)
    ↓                                      {
Command.class                               System.out.println(args[0]);   //Scott
    ↓                                      }
  java                                 }
                                        java Command.java (Compilation process)
                                        java Command  Scott  Smith
                                                      [0]    [1]
```
                                        Scott   Smith
                                        [0]   [1]

I/Programs :

//WAP in java to pass some value using command line argument

```
public class Command
{
    public static void main(String[] args)
    {
        System.out.println(args[0]);
    }
}
```
java Command.java
java Command Scott Smith

Output is : Scott

//WAP in java to pass some value using command line argument
```
public class Command
{
    public static void main(String[] args)
    {
        System.out.println(args[1]);
    }
}
```
java Command.java
java Command Scott Smith

Output is : Smith

Note : Every time we modify .java file (Source code) then we need to re-compile our java program
----
```
public class Command
{
    public static void main(String[] args)
    {
        System.out.println(args[0]);
    }
}
```
java Command.java
java Command   (Not passing any value at runtime)

The above program is expecting at-least one value from the command line argument. If we don't pass any value at runtime then we will get a runtime exception i.e java.lang.ArrayIndexOutOfBoundsException.

//WAP to accept all different kinds of values using command line argument
```
public class DifferentValuesUsingCommand
{
    public static void main(String[] x)
    {
        System.out.println(x[0]);
        System.out.println(x[1]);
        System.out.println(x[2]);
    }
}
```
java DifferentValuesUsingCommand.java
java DifferentValuesUsingCommand 78 89.99 NIT

Output :
78
89.99
NIT
---//WAP to print full name of the the argument.

Indian Player (Akhilesh Sharma using Command line argument)
```
public class FullName
{
    public static void main(String[] name)
    {
        System.out.println(name[0]);
    }
}
```
java FullName.java
java FullName "Akhilesh Sharma"
Output : Akhilesh Sharma

java FullName "Virat Kohli"
Output : Virat Kohli

Note : Single time compilation and number of times execution.

WAP in java to add two numbers by using Command Line Argument :

```
public class CommandAdd
{
    public static void main(String[] num)
    {
        System.out.println("Sum is :"+(num[0] + num[1]));
    }
}
```
java CommandAdd.java
java CommandAdd 100 200

Output is : Sum is : 100200

Note : Here num is String type of variable hence '+' operator will behave as String concatenation operator.

How to convert a String value into integer :

There is a predefined class called **Integer** available in java.lang package.
This Integer class contains a predefined **static** method called **parseInt(String x)**, this parseInt() method accept a **single parameter variable of type String.**

```
String x = "123";                      //Available in Java library (Package)
//Converting the String into integer   public class Integer -----"123"
int xx = Integer.parseInt(x);          {
                        123               public static int parseInt(String x)
                                          {
                                            //Will convert the String into int
                                            and return the int value
                                          }
                                        }
```

* This parseInt(String x) method whose return type is int, will automatically convert the given String into integer type and return the integer value.

//WAP in java to perform addition of two numbers by using command line argument with arithmetic operator.
```
public class CommandAddition
{
    public static void main(String[] args)
    {
        //Convert the String into integer
        int x = Integer.parseInt(args[0]);
        int y = Integer.parseInt(args[1]);

        System.out.println("Sum of two integer is :"+(x+y));
    }
}
```