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C31 - 2003148

Experiment 3: Programs based on Command-line arguments

Theory :

Command Line Argument

- The command-line argument in Java are the arguments passed to a program at the time when you run it. They are stored in the string format and the String array is passed to the args[] parameter of main() method.

- Every Number classes such as Integer, Float, Double and so on have parseXXX method that converts String into the respective object of their type.

- As we all know that array starts its index with zero. Therefore args[0] is the first index in this String[] array which is taken from the console. Similarly, args[1] is second, args[2] is the third element and so on.

- When an application is launched, the run-time system passes the command-line arguments to the application's main method via an array of Strings.

- A simple program to output a command line argument is as follows

```
class CommandLineExample{
        public static void main(String args[]){
                System.out.println("Your first argument is: "+args[0]);
        }
}
```

- We can print the number of arguments and their value on the standard output:

```
  public static void main(String[] args) {
          System.out.println("Argument count: " + args.length);
          for (int i = 0; i < args.length; i++) {
                  System.out.println("Argument " + i + ": " + args[i]);
          }}
```

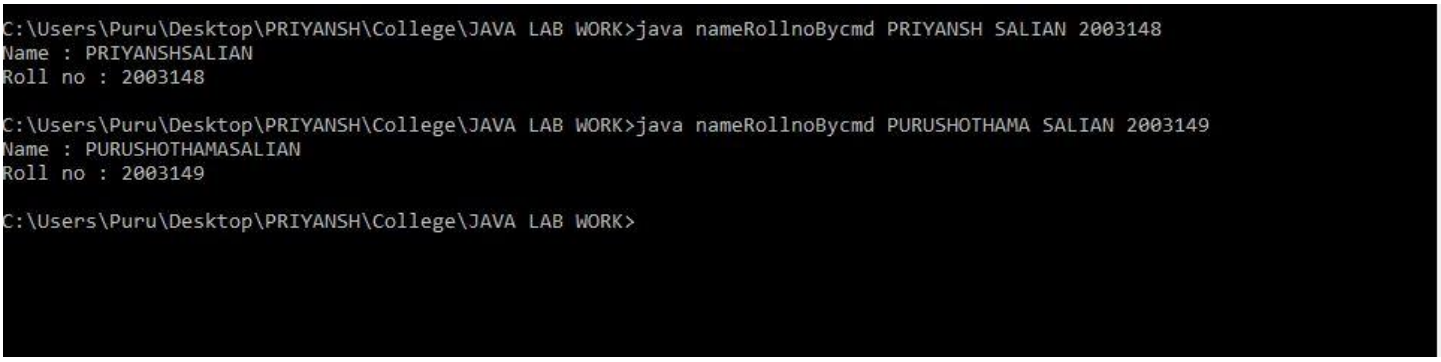
A.

Aim : WAP to accept student's details via command line and display on the screen.

Program :

```
public class nameRollnoBycmd {
   public static void main(String[] args) {
      System.out.println("Name : "+ args[0]+ ""+ args[1]);
      System.out.println("Roll no : "+ args[2]);
   }
}
```

Output :



B.

Aim : WAP to add two numbers accepted via command line .

Program :

```
public class addnumBycmd {
   public static void main(String[] args) {
      int sum =  Integer.parseInt(args[1]) + Integer.parseInt(args[0]);
      System.out.println("Sum = "+sum);
   }
}
```

Output :

```
C:\Users\Puru\Desktop\PRIYANSH\College\JAVA LAB WORK>javac addnumBycmd.java

C:\Users\Puru\Desktop\PRIYANSH\College\JAVA LAB WORK>java addnumBycmd 15 67
Sum = 82

C:\Users\Puru\Desktop\PRIYANSH\College\JAVA LAB WORK>
```

C.

Aim : WAP to calculate minimum and maximum of three numbers accepted via Command line.

Program :

```
public class maxOf3Bycmd {
   public static void main(String[] args) {

      int[] n = new int[3];
      int max,min;

      for(int i=0;i<3;i++){
         n[i]= Integer.parseInt(args[i]);
      }
      max= min= n[0];

      for (int i : n) {
         max =(i>max) ? i : max ;
         min =(i<min) ? i : min ;
      }
      System.out.println(max +" is largest \n"+min +" is smallest");

   }
}
```

Output :

```
C:\Users\Puru\Desktop\PRIYANSH\College\JAVA LAB WORK>javac maxOf3Bycmd.java

C:\Users\Puru\Desktop\PRIYANSH\College\JAVA LAB WORK>java maxOf3Bycmd 554 63 349
554 is largest
63 is smallest

C:\Users\Puru\Desktop\PRIYANSH\College\JAVA LAB WORK>
```