

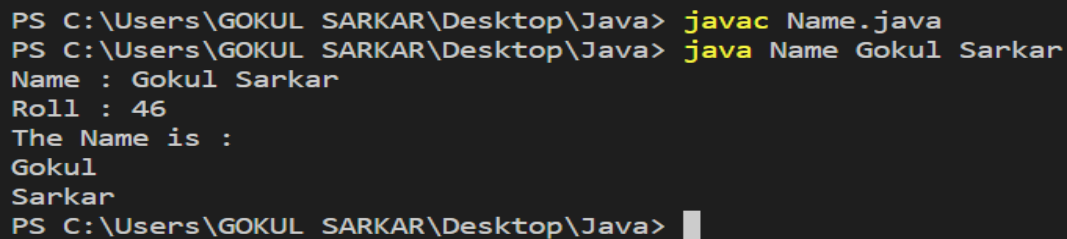
**Name : Gokul Sarkar**

**Roll No. : 46**

**/\* 1. Write a Java Program to print your Name entered through the command line as an argument. \*/**

```
public class Name {  
    public static void main(String args[]) {  
        System.out.println("Name : Gokul Sarkar \nRoll : 46");  
        System.out.println("The Name is :");  
        for (int i = 0; i < args.length; i++) {  
            System.out.println(args[i]);  
        }  
    }  
}
```

**Output:**



```
PS C:\Users\GOKUL SARKAR\Desktop\Java> javac Name.java  
PS C:\Users\GOKUL SARKAR\Desktop\Java> java Name Gokul Sarkar  
Name : Gokul Sarkar  
Roll : 46  
The Name is :  
Gokul  
Sarkar  
PS C:\Users\GOKUL SARKAR\Desktop\Java>
```

**/\* 2. Write a Java program to convert Temperature from Fahrenheit to Celsius and vice versa. \*/**

```
import java.util.Scanner;  
  
public class Fahrenheittocelsius {  
    public static void main(String args[]) {  
        Scanner sc = new Scanner(System.in);  
        System.out.println("Name : Gokul Sarkar \nRoll : 46");  
        System.out.println("Enter temperature in Fahrenheit:");  
        float temperature = sc.nextFloat();  
        float celsius = toCelsius(temperature);  
    }  
}
```

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```
System.out.printf("%.02f Fahrenheit = %.02f celsius %n",temperature,celsius);
System.out.println("Enter temperature in Celsius:");
temperature = sc.nextFloat();
float Fahrenheit = toFahrenheit(temperature);
System.out.printf("%.02f celsius = %.02f Fahrenheit %n",temperature,Fahrenheit);
}
public static float toFahrenheit(float celsius) {
    float Fahrenheit = 9*(celsius/5)+32;
    return Fahrenheit;
}
public static float toCelsius(float Fahrenheit) {
    float celsius = (Fahrenheit-32)*5/9;
    return celsius;
}
}
```

### **Output:**

```
PS C:\Users\GOKUL SARKAR\Desktop\Java> javac Fahrenheittocelsius.java
PS C:\Users\GOKUL SARKAR\Desktop\Java> java Fahrenheittocelsius
Name : Gokul Sarkar
Roll : 46
Enter temperature in Fahrenheit:
45
45.00 Fahrenheit = 7.22 celsius
Enter temperature in Celsius:
7.22
7.22 celsius = 45.00 Fahrenheit
PS C:\Users\GOKUL SARKAR\Desktop\Java> █
```

### **/\* 3. Write a Java program to add two numbers. \*/**

```
import java.util.Scanner;

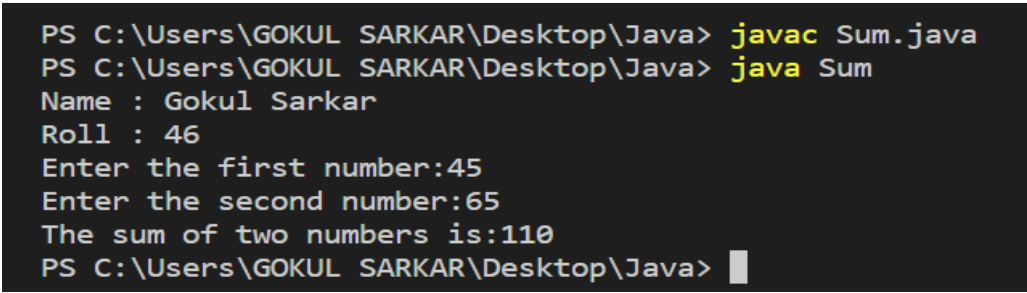
public class Sum {
    public static void main(String args[]) {
```

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```
Scanner sc = new Scanner(System.in);
System.out.println("Name : Gokul Sarkar \nRoll : 46");
System.out.print("Enter the first number:");
int x=sc.nextInt();
System.out.print("Enter the second number:");
int y=sc.nextInt();
int sum=sum(x,y);
System.out.println("The sum of two numbers is:"+sum);
}
public static int sum(int a,int b) {
    int sum=a+b;
    return sum;
}
}
```

### **Output:**



```
PS C:\Users\GOKUL SARKAR\Desktop\Java> javac Sum.java
PS C:\Users\GOKUL SARKAR\Desktop\Java> java Sum
Name : Gokul Sarkar
Roll : 46
Enter the first number:45
Enter the second number:65
The sum of two numbers is:110
PS C:\Users\GOKUL SARKAR\Desktop\Java> █
```

**/\* 4. Write a java Program to find the area and Perimeter of a rectangle.  
\*/**

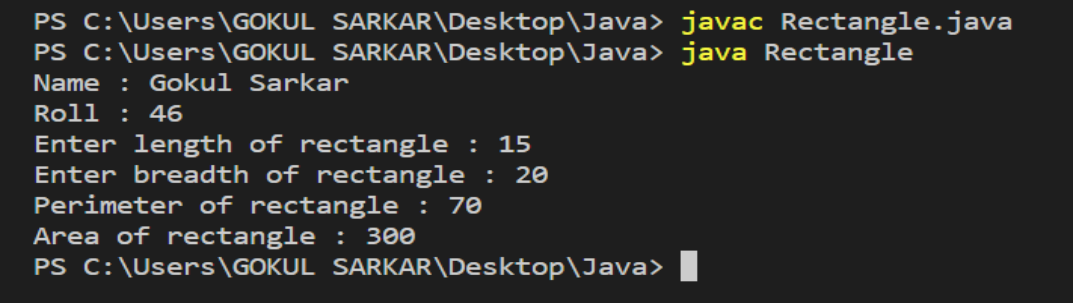
```
import java.util.Scanner;
public class Rectangle {
    public static void main(String args[]) {
        System.out.println("Name : Gokul Sarkar \nRoll : 46");
```

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```
Scanner sc = new Scanner(System.in);
System.out.print("Enter length of rectangle : ");
int length = sc.nextInt();
System.out.print("Enter breadth of rectangle : ");
int breadth = sc.nextInt();
int perimeter = 2 * (length + breadth);
System.out.println("Perimeter of rectangle : "+perimeter);
int area = length * breadth;
System.out.println("Area of rectangle : "+area);
}
}
```

### **Output:**



```
PS C:\Users\GOKUL SARKAR\Desktop\Java> javac Rectangle.java
PS C:\Users\GOKUL SARKAR\Desktop\Java> java Rectangle
Name : Gokul Sarkar
Roll : 46
Enter length of rectangle : 15
Enter breadth of rectangle : 20
Perimeter of rectangle : 70
Area of rectangle : 300
PS C:\Users\GOKUL SARKAR\Desktop\Java> █
```

**/\* 5. Write a program in Java to find the maximum of three numbers. \*/**

```
import java.util.Scanner;

public class Maximum {

    public static void main(String args[]) {

        System.out.println("Name : Gokul Sarkar \nRoll : 46");

        Scanner sc = new Scanner(System.in);

        System.out.print("Enter the first number:");

        int a=sc.nextInt();

        System.out.print("Enter the second number:");
```

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```
int b=sc.nextInt();
System.out.print("Enter the third number:");
int c=sc.nextInt();
int largest;
if(a > b) {
    if(a > c) {
        largest=a;
    }
    else {
        largest=c;
    }
}
else if(b > c) {
    largest=b;
}
else {
    largest=c;
}
System.out.println("The maximum among three numbers is:"+largest);
}
```

### **Output:**

```
PS C:\Users\GOKUL SARKAR\Desktop\Java> javac Maximum.java
PS C:\Users\GOKUL SARKAR\Desktop\Java> java Maximum
Name : Gokul Sarkar
Roll : 46
Enter the first number:25
Enter the second number:65
Enter the third number:45
The maximum among three numbers is:65
PS C:\Users\GOKUL SARKAR\Desktop\Java> █
```

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***/\*6. Write a Java Program to check whether a given year is a leap year.  
\*/***

```
import java.util.Scanner;

public class Leapyear {
    public static void main(String args[]) {
        System.out.println("Name : Gokul Sarkar \nRoll : 46");
        int year;
        System.out.println("Enter an Year:");
        Scanner sc = new Scanner(System.in);
        year = sc.nextInt();
        if(((year%4==0)&&(year%100!=0))||((year%400==0))) {
            System.out.println("The year is a leap year");
        }
        else {
            System.out.println("The year is not a leap year");
        }
    }
}
```

**Output:**

```
PS C:\Users\GOKUL SARKAR\Desktop\Java> javac Leapyear.java
PS C:\Users\GOKUL SARKAR\Desktop\Java> java Leapyear
Name : Gokul Sarkar
Roll : 46
Enter an Year:
2018
The year is not a leap year
PS C:\Users\GOKUL SARKAR\Desktop\Java> java Leapyear
Name : Gokul Sarkar
Roll : 46
Enter an Year:
2016
The year is a leap year
PS C:\Users\GOKUL SARKAR\Desktop\Java> █
```

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**/\* 7. Create four different classes with three of them containing the function main. Save the file with a different name than that of the class name and run each of the classes with the main function. \*/**

```
class Hello1 {  
    public static void main(String[] args) {  
        System.out.println("Name : Gokul Sarkar \nRoll : 46");  
        System.out.println("Hello1 Class");  
    }  
}
```

```
class Hello2 {  
    public static void main(String[] args) {  
        System.out.println("Name : Gokul Sarkar \nRoll : 46");  
        System.out.println("Hello2 Class");  
    }  
}
```

```
class Hello3{  
    public static void main(String[] args) {  
        System.out.println("Name : Gokul Sarkar \nRoll : 46");  
        System.out.println("Hello3 Class");  
    }  
}
```

```
class Hello4{  
    public static void main(String[] args) {  
        System.out.println("Name : Gokul Sarkar \nRoll : 46");  
        System.out.println("Hello4 Class");  
    }  
}
```

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## Output:

```
PS C:\Users\GOKUL SARKAR\Desktop\Java> javac Hello1.java
PS C:\Users\GOKUL SARKAR\Desktop\Java> java Hello1
Name : Gokul Sarkar
Roll : 46
Hello1 Class
PS C:\Users\GOKUL SARKAR\Desktop\Java> java Hello2
Name : Gokul Sarkar
Roll : 46
Hello2 Class
PS C:\Users\GOKUL SARKAR\Desktop\Java> java Hello3
Name : Gokul Sarkar
Roll : 46
Hello3 Class
PS C:\Users\GOKUL SARKAR\Desktop\Java> java Hello4
Name : Gokul Sarkar
Roll : 46
Hello4 Class
PS C:\Users\GOKUL SARKAR\Desktop\Java> █
```

**/\* 8. Write a java program to reverse a number entered as a command line argument. \*/**

```
public class Reverse {
    public static void main(String args[]) {
        System.out.println("Name : Gokul Sarkar \nRoll : 46");
        int x = Integer.parseInt(args[0]);
        int rev = 0;
        while (x != 0) {
            rev *= 10;
            rev += x % 10;
            x /= 10;
        }
        System.out.println("The Reverse of Given Number is:\t" + rev);
    }
}
```

## Output:

```
PS C:\Users\GOKUL SARKAR\Desktop\java> javac Reverse.java
PS C:\Users\GOKUL SARKAR\Desktop\java> java Reverse 456789
Name : Gokul Sarkar
Roll : 46
The Reverse of Given Number is: 987654
PS C:\Users\GOKUL SARKAR\Desktop\java> █
```



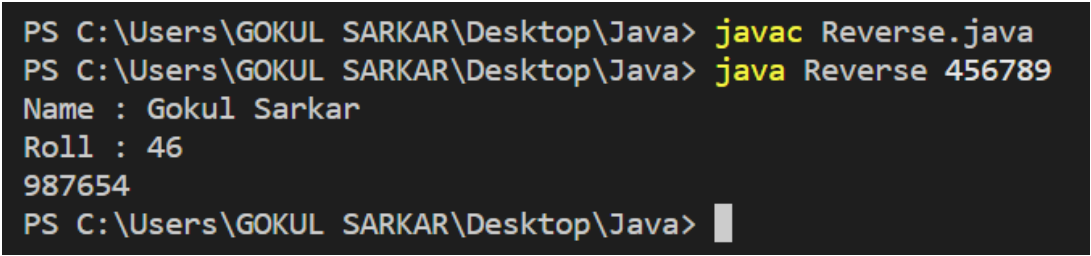
**Name : Gokul Sarkar**

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**/\* 9. Write a java Program to count the number of digits entered through the command line argument. \*/**

```
public class NumberofDigits {  
    public static void main(String args[]) {  
        System.out.println("Name : Gokul Sarkar \nRoll : 46");  
        int num,count=0;  
        num=Integer.parseInt(args[0]);  
        while(num!=0) {  
            num/=10;  
            ++count;  
        }  
        System.out.println("Number of digits:"+count);  
    }  
}
```

**Output:**



```
PS C:\Users\GOKUL SARKAR\Desktop\Java> javac Reverse.java  
PS C:\Users\GOKUL SARKAR\Desktop\Java> java Reverse 456789  
Name : Gokul Sarkar  
Roll : 46  
987654  
PS C:\Users\GOKUL SARKAR\Desktop\Java> █
```

**/\* 10. Write a java program to find all the multiples of 3 within a given range where the starting and ending value are entered through command line argument. \*/**

```
public class Multiples {  
    public static void main(String args[]) {  
        System.out.println("Name : Gokul Sarkar \nRoll : 46");  
        int num,i,j;
```

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```
num=Integer.parseInt(args[0]);
j=Integer.parseInt(args[1]);
for(i = n;i<=j;i++){
    if(i%3==0) {
        System.out.println(i);
    }
}
}
```

**Output:**

```
PS C:\Users\GOKUL SARKAR\Desktop\java> javac Multiples.java
PS C:\Users\GOKUL SARKAR\Desktop\java> java Multiples 14 28
Name : Gokul Sarkar
Roll : 46
15
18
21
24
27
PS C:\Users\GOKUL SARKAR\Desktop\java> █
```