CS2304 JAVA PROGRAMMING

Primitive Data types in Java

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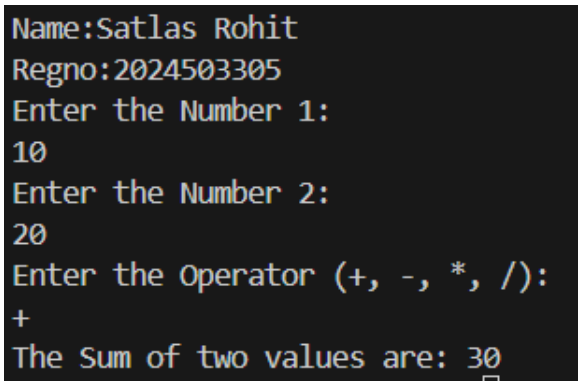
1.1 Code

```
import java.util.Scanner;
class Main {
        public static void main(String[] args) {
            int inp1, inp2, sum = 0;
            char symbol;
            Scanner scan = new Scanner(System.in);
            System.out.println("Name:Satlas Rohit\nRegno:2024503305");
            System.out.println("Enter the Number 1:");
            inp1 = scan.nextInt();
            System.out.println("Enter the Number 2:");
            inp2 = scan.nextInt();
            System.out.println("Enter the Operator (+, -, *, /):");
            symbol = scan.next().charAt(0);
            switch(symbol) {
               case '+':
                  sum = inp1 + inp2;
                  System.out.println("The Sum of two values are: " + sum);
                  break;
               case '-':
```

```
            sum = inp1 - inp2;
            System.out.println("The Subtraction of two values are: " +
sum);
            break;
         case '*':
            sum = inp1 * inp2;
            System.out.println("The Multiplication of two values are: " +
sum);
            break;
         case '/':
            if (inp2 != 0) {
               sum = inp1 / inp2;
               System.out.println("The Division of two values are: " +
sum);
            } else {
               System.out.println("Error: Division by zero!");
            }
            break;
         default:
            System.out.println("The Symbol is not present");
            break;
      }
      scan.close(); // Close the Scanner
   }
}
```

Output:



1.2 Code

```
import java.util.Scanner;
class Main {
    public static void main(String[] args) {
        Scanner scan = new Scanner(System.in);
        int runs;
        byte fouls;
        boolean winStatus;
        System.out.println("Name:Satlas Rohit\nRegno:2024503305");
        System.out.println("Enter the team runs:");
        runs = scan.nextInt();
        System.out.println("Enter the number of fouls:");
        fouls = (byte) scan.nextInt();
        winStatus = (runs >= 50 && fouls <= 5);
        System.out.println("Team Runs: " + runs);
        System.out.println("Number of Fouls: " + fouls);
        System.out.println("Win Status: " + (winStatus ? "win" : "lose"));
        scan.close();
```

```
    }
}
```

Output:

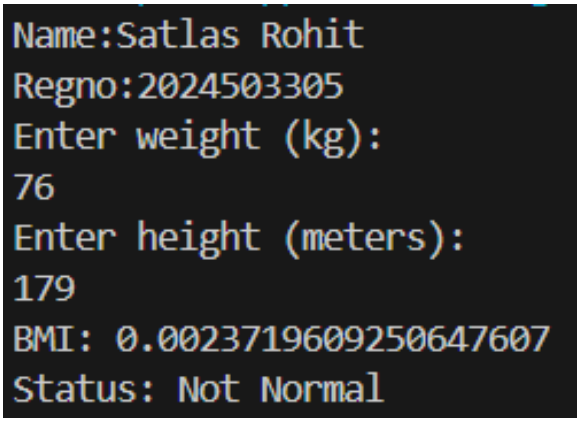
```
Name:Satlas Rohit
Regno:2024503305
Enter the team runs:
70
Enter the number of fouls:
3
Team Runs: 70
Number of Fouls: 3
Win Status: win
```

1.3 Code

```
import java.util.Scanner;
class Main {
    public static void main(String[] args) {
        Scanner scan = new Scanner(System.in);
        double weight, height, bmi;
        boolean isNormalBMI;
        System.out.println("Name:Satlas Rohit\nRegno:2024503305");
        System.out.println("Enter weight (kg):");
        weight = scan.nextDouble();
        System.out.println("Enter height (meters):");
        height = scan.nextDouble();
        bmi = weight / (height * height);
        isNormalBMI = (bmi >= 18.5 && bmi < 25);
        System.out.println("BMI: " + bmi);
```

```
        System.out.println("Status: " + (isNormalBMI ? "Normal" : "Not
Normal"));
        scan.close();
    }
}
```

Output:



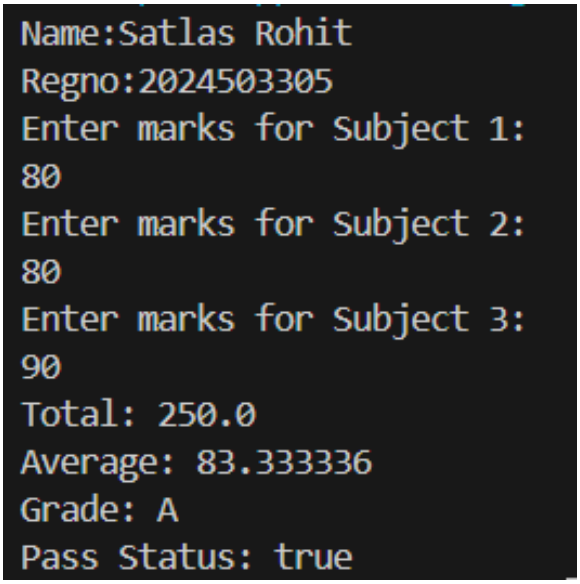
1.4 Code

```
import java.util.Scanner;
class Main {
    public static void main(String[] args) {
        Scanner scan = new Scanner(System.in);
        float sub1, sub2, sub3, total, average;
        char grade;
        boolean passStatus;
        System.out.println("Name:Satlas Rohit\nRegno:2024503305");
        System.out.println("Enter marks for Subject 1:");
        sub1 = scan.nextFloat();
        System.out.println("Enter marks for Subject 2:");
        sub2 = scan.nextFloat();
```

```
System.out.println("Enter marks for Subject 3:");
sub3 = scan.nextFloat();
total = sub1 + sub2 + sub3;
average = total / 3;
passStatus = (sub1 >= 50 && sub2 >= 50 && sub3 >= 50);
if (sub1 < 50 || sub2 < 50 || sub3 < 50) {
   grade = 'U';
} else {
   if (average >= 90) {
      grade = 'S';
   } else if (average >= 80) {
      grade = 'A';
   } else if (average >= 70) {
      grade = 'B';
   } else if (average >= 60) {
      grade = 'C';
   } else {
      grade = 'D';
   }
}
System.out.println("Total: " + total);
System.out.println("Average: " + average);
System.out.println("Grade: " + grade);
System.out.println("Pass Status: " + passStatus);
scan.close();
```

```
    }
}
```

Output:



1.5 Code

```
import java.util.Scanner;
class Main {
    public static void main(String[] args) {
        Scanner scan = new Scanner(System.in);
        double celsius;
        double fahrenheit;
        boolean isHot;
        System.out.println("Name:Satlas Rohit\nRegno:2024503305");
        System.out.println("Enter temperature in Celsius:");
        celsius = scan.nextDouble();
        fahrenheit = (celsius * 9 / 5) + 32;
        isHot = (fahrenheit > 100);
        System.out.println("Temperature: " + celsius + "C (" + fahrenheit + "F)");
```

```
        System.out.println("Is Hot: " + isHot);
        scan.close();
    }
}
```

Output: