Batch code: ANP-C7781 Student code: AF0403155

1. Write a Java program to print "Hello, World!" to the console.

```
package demo;
public class hello {

public static void main(String[] args) {

System.out.println("Hello World!");

}
}
```

Output:

Hello World!

2. Write a program to find the sum of two numbers entered by the user.

```
package demo;
import java.util.Scanner;
public class sum {
  public static void main(String[] args) {
  int a,b,c; // Declaring variables

  Scanner s=new Scanner(System.in);
  System.out.println("enter first number:"); // taking user input

a=s.nextInt();
  System.out.println("enter second number:");
  b=s.nextInt();
  c=a+b;
  System.out.println("Sum of two numbers is: "+c);
  }
}
```

```
<terminated> sum [Java Application] C:\Users\rashm\
enter first number:
85
enter second number:
66
Sum of two numbers is: 151
```

3. Write a Java program to check whether a given number is even or odd.

```
package demo;
import java.util.Scanner;
public class oddnum {
public static void main(String[] args) {
Scanner a = new Scanner(System.in);
System.out.print("Enter a number: "); // taking user input
int num = a.nextInt();// Declaring variables
if(num % 2 == 0) // Checking condition
System.out.println(num + " is even");
else
System.out.println(num + " is odd");
}
Output:
<terminated> oddnum [Java Application] C:\Users\rashm\.p2\p
Enter a number: 98
98 is even
```

4. Write a java program to find greatest of 2 numbers.

```
package demo;
public class greatestnum {
  public static void main(String[] args) {
    // TODO Auto-generated method stub

int num1 = 50, num2 = 20; // Declaring variables

if (num1 == num2) // Checking condition

System.out.println ("both are equal");
else if (num1 > num2)

System.out.println (num1 + " is greater");
else

System.out.println (num2 + " is greater");
}
}
```

Output:

Problems @ Javadoc □ Declaration □ Console ×
<terminated> greatestnum [Java Application] C:\Users\rashm\.p2
50 is greater

5. Write a program to implement a basic calculator that takes input as a string expression and evaluates it.

```
package demo;
import java.util.Scanner;
public class calculator {
public static void main(String[] args) {
Scanner n = new Scanner(System.in);
double num1, num2, result; // Declaring variables
char operator;
System.out.print("Enter first number: "); // taking user input
num1 = n.nextDouble();
System.out.print("Enter an operator (+, -, *, /): ");
operator = n.next().charAt(0);
System.out.print("Enter second number: ");
num2 = n.nextDouble();
// Checking condition
if (operator == '+') {
result = num1 + num2;
} else if (operator == '-') {
result = num1 - num2;
} else if (operator == '*') {
result = num1 * num2;
```

```
} else if (operator == '/') {
if (num2 != 0) {
result = num1 / num2;
} else {
System.out.println("Error: Division by zero is not allowed.");
return;
}
} else {
System.out.println("Error: Invalid operator.");
return;
}
System.out.println("Result: " + result);
}
}
```

```
<terminated> calculator [Java Application] C:\Users\rashm\.p2\pool\
Enter first number: 148
Enter an operator (+, -, *, /): *
Enter second number: 758
Result: 112184.0
```

6. Write a Java program to check if a given number is even or odd.

```
package demo;
import java.util.Scanner;

public class oddnum {

public static void main(String[] args) {

Scanner a = new Scanner(System.in);

System.out.print("Enter a number: ");// taking user input

int num = a.nextInt(); // Declaring variables

if(num % 2 == 0) // Checking condition

System.out.println(num + " is even");
else

System.out.println(num + " is odd");
}
}
```

```
<terminated> oddnum [Java Application] C:\Users\rashm\.p2\pool\p
Enter a number: 77
77 is odd
```

7. Create a Java program that compares two numbers and prints the larger one.

```
package demo;
import java.util.Scanner;
public class largest
public static void main(String[] args)
{// Declaring variables
int num1, num2, largest;
Scanner a= new Scanner(System.in);
System.out.print("Enter the First Number: ");// taking user input
num1 =a.nextInt();
System.out.print("Enter the Second Number: ");// taking user input
num2 =a.nextInt();
if(num1>num2) // Checking condition
largest = num1;
else
largest = num2;
System.out.println("\nLargest = " +largest);
}
}
```

```
<terminated> largest [Java Application] C:\Users\rashm\.p2\pool\
Enter the First Number: 6757587
Enter the Second Number: 466

Largest = 6757587
```

8. Write a Java program that takes an age input from the user and determines if they are eligible to vote (considering the legal voting age).

```
package demo;
import java.util.Scanner;
public class vote {
public static void main(String[] args)
{
// Declaring variables
int age, diff;
// taking user input
Scanner scan = new Scanner(System.in);
System.out.println("Please enter your age: ");
age = scan.nextInt();
// Checking condition
if(age>=18)
{
System.out.println("You are eligible for voting.");
else
diff = (18 - age);
System.out.println("Sorry, You can vote after: "+ diff + " years");
}
}
```

```
Please enter your age:
22
You are eligible for voting.
```