FULL STACK DEVELOPMENT – WORKSHEET -A

Ques 1. Write a java program Add two Numbers.

Ans.

```
package flip_Robo;

import java.util.Scanner;

public class AddTwoNumbers {

	// Define a method that takes two integers as input
and return their sum.
	public static int add(int a, int b) {
		return a + b;
	}

	public static void main(String[] args) {
		Scanner sc = new Scanner(System.in);
		System.out.println("Enter any two numbers: ");
		int num1 = sc.nextInt();
		int num2 = sc.nextInt();
		sc.close();

		// Call the method to add the two numbers
		int res = add(num1, num2);

		//Print the output.
		System.out.println("The sum of Two Numbers is:
" + res);
	}
}
```

Ques 2. Write a java program Check Whether a Number is Even or Odd.

Ans.

```
package flip_Robo;

import java.util.Scanner;

public class EvenOrOdd {

	// Define a method to check if a given number is
even or odd.
	public static String check(int n) {
		if (n % 2 == 0) {
			return "Even Number";
```

```
            } else {
                return "Odd Number";
            }
      }

      public static void main(String[] args) {
            Scanner sc = new Scanner(System.in);
            System.out.println("Enter any Positive number:
");
            int num = sc.nextInt();
            sc.close();

            // Check if the input is valid or not.
            if (num < 1) {
            System.out.println("Invalid input. Please enter
any positive number");
            return;
            }
            //Call the method which checks the given input
"even" or "odd".
            String res = check(num);

            //Print the output.
            System.out.println("It is a " + res);

      }

}
```

Ques 3. Write a java program Check if a given number is palindrome or not.

Ans.

```
package flip_Robo;

import java.util.Scanner;

public class CheckPalindromeNumber {

      //Define a method to check if a given number is
"Palindrome" or not.
      public static boolean isPalindrome(String str) {

            // Compare both ends of a given number.
            for (int i = 0, j = str.length() - 1; i < j;
i++, j--) {
                  /*
                   * during the loop if any character of i
and j while comparing are not equal then
                   * return false
```

```
                 */
                if (str.charAt(i) != str.charAt(j)) {
                     return false;
                }
           }
           return true;
     }

     public static void main(String[] args) {
           Scanner sc = new Scanner(System.in);
           System.out.println("Enter the number: ");
           int num = sc.nextInt();
           sc.close();

           // convert the number into string.
           String str = Integer.toString(num);

           // Call the method to check if the given number
is palindrome or not.
           boolean check = isPalindrome(str);

           // Print the result based on the value returned
by the method "isPalindrome".
           if (check) {
                System.out.println(num + " is a
Palindrome");
           } else {
                System.out.println(num + " is not a
palindrome");
           }
     }

}
```

Ques 4. Write a java program to find the sum of n natural numbers.

Ans.

```
package flip_Robo;

import java.util.Scanner;

public class SumofNaturalNumbers {

     //Define a method to calculate the sum of natural
numbers.
     public static int sumofNaturalNumbers(int n) {
           int sum = 0;

           for (int i = 0; i <= n; i++) {
                sum = sum + i;
           }
```

```
            return sum;
      }

      public static void main(String[] args) {
            Scanner sc = new Scanner(System.in);
            System.out.println("Enter any Natural number:
");
            int num = sc.nextInt();
            sc.close();

            // Check if the input is valid or not.
            if (num < 1) {
                  System.out.println("Invalid input. Please
enter any positive number");
                  return;
                  }

            // Call the method to find the sum of 'n'
natural numbers.
            int sum = sumofNaturalNumbers(num);

            //Display the output.
            System.out.println("The sum of given " + num +
" natural numbers is " + sum);

      }
}
```

Ques 5. Write a java program to Check Prime Number or not.

Ans.

```
package flip_Robo;

import java.util.Scanner;

public class PrimeNumber {

      //Define a method to check if a given number is
prime or not.
      public static boolean isPrime(int num) {
            if (num < 2) {
                  return false;
            }

            for (int i = 2; i * i <= num; i++) {
                  if (num % i == 0) {
                        return false;
                  }
            }
            return true;
```

```
	}

	public static void main(String[] args) {
		Scanner sc = new Scanner(System.in);
		System.out.println("Enter a number: ");

		int num = sc.nextInt();
		sc.close();

		// Call the method to check if a number is
Prime or not.
		boolean check = isPrime(num);

		// Print the result based on the value returned
by the method.
		if (check) {
			System.out.println(num + " is a Prime
number");
		} else {
			System.out.println(num + " is not a Prime
number");
		}

	}
}
```