

Ques 1. Write a java program Add two Numbers?

Ans. import java.util.Scanner;

```
public class AddTwoNumbers {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        System.out.println("Enter the first number: ");
        double num1 = scanner.nextDouble();

        System.out.println("Enter the second number: ");
        double num2 = scanner.nextDouble();

        double sum = num1 + num2;
        System.out.println("The sum of " + num1 + " and " + num2 + " is: " + sum);

        scanner.close();
    }
}
```

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

Ans. import java.util.Scanner;

```
public class EvenOrOdd {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        System.out.println("Enter a number: ");
        int number = scanner.nextInt();

        if (isEven(number)) {
            System.out.println(number + " is even.");
        } else {
            System.out.println(number + " is odd.");
        }

        scanner.close();
    }

    public static boolean isEven(int number) {
        return number % 2 == 0;
    }
}
```

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

Ans. import java.util.Scanner;

```
public class PalindromeCheck {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        System.out.println("Enter a number: ");
        int number = scanner.nextInt();

        if (isPalindrome(number)) {
            System.out.println(number + " is a palindrome.");
        } else {
            System.out.println(number + " is not a palindrome.");
        }

        scanner.close();
    }

    public static boolean isPalindrome(int number) {
        int originalNumber = number;
        int reversedNumber = 0;

        while (number > 0) {
            int digit = number % 10;
            reversedNumber = reversedNumber * 10 + digit;
            number /= 10;
        }

        return originalNumber == reversedNumber;
    }
}
```

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

Ans. import java.util.Scanner;

```
public class SumOfNaturalNumbers {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        System.out.print("Enter a positive integer (n): ");
```

```

int n = scanner.nextInt();

int sum = calculateSum(n);

System.out.println("Sum of first " + n + " natural numbers is: " + sum);

scanner.close();
}

public static int calculateSum(int n) {
    // Formula to calculate sum of first n natural numbers: sum = n * (n + 1) / 2
    return n * (n + 1) / 2;
}
}

```

Ques 5. Write a java program to Check Prime Number or no?

Ans. import java.util.Scanner;

```

public class PrimeNumberCheck {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        System.out.print("Enter a positive integer: ");
        int number = scanner.nextInt();

        if (isPrime(number)) {
            System.out.println(number + " is a prime number.");
        } else {
            System.out.println(number + " is not a prime number.");
        }

        scanner.close();
    }

    public static boolean isPrime(int number) {
        if (number <= 1) {
            return false; // Numbers less than or equal to 1 are not prime.
        }

        // Check for factors from 2 to the square root of the number.
        for (int i = 2; i <= Math.sqrt(number); i++) {

```

```
    if (number % i == 0) {  
        return false; // If the number has a factor other than 1 and itself, it is not prime.  
    }  
}  
  
return true; // If no factors other than 1 and itself are found, the number is prime.  
}
```