

1. Write a java program Add two Numbers

```
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: ");
        int num1 = scanner.nextInt();

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

        int sum = num1 + num2;

        System.out.println("The sum of the two numbers is: " + sum);
    }
}
```

Explanation : At first we need to import the scanner class and name it . Then create a scanner object to read the input from the user. It gets the 2 inputs from the user and saves them as num1 and num2 variables. Finally it executes the code and saves the output to sum then it will be printed out.

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

```
import java.util.Scanner;

public class EvenOdd {

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

        if (number % 2 == 0) {
            System.out.println(number + " is even");
        } else {
            System.out.println(number + " is odd");
        }
    }
}
```

Explanation : First we need to import the scanner class and name it . Then create a scanner object to read the input from the user. The number is then stored in an int variable called number. And then the second step is to check whether the number is even or odd. For that we use the modulo operator (%). The modulo operator returns the remainder of a given number.

Here we use If Condition to check whether the given number is even or Odd. If the condition is satisfied or correct, the loop in If condition starts to execute. If not, the else part will start to execute.

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

```
import java.util.Scanner;

public class PalindromeNumber {

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

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

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

Explanation : First we need to import the scanner class and name it . Then create a scanner object to read the input from the user. Then, it reverses the number by repeatedly dividing the number by 10 and storing the remainder in a variable called reverse. Once the number is reversed, the If condition compares it to the original number whether the both numbers are equal or not... If the two numbers are equal, then the number is a palindrome. Else, the number is not a palindrome.

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

```
import java.util.Scanner;

public class SumOfNaturalNumbers {

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

        System.out.println("Enter the number of natural numbers: ");
        int n = scanner.nextInt();

        int sum = 0;
        for (int i = 1; i <= n; i++) {
            sum += i;
        }

        System.out.println("The sum of the first " + n + " natural numbers is " + sum);
    }
}
```

Explanation : First we need to import the scanner class and get the input from the user. Then, it creates a variable sum to store the sum of the natural numbers. A for loop is used to iterate from 1 to n, and the value of each iteration is added to the sum. Finally, the value of sum is printed.

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

```
import java.util.Scanner;

public class PrimeNumber {

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

        boolean isPrime = true;
        for (int i = 2; i <= Math.sqrt(number); i++) {
            if (number % i == 0) {
                isPrime = false;
                break;
            }
        }

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

Explanation : In this program the user wants to enter a number. Then, it uses a for loop to iterate from 2 to the square root of the number. For each number in the loop, it checks if the number is divisible by the current number. If it is, then the number is not a prime number. Otherwise, the number is a prime number. At last, it prints out whether the number is a prime number or not.