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Question 1: Write a Java Program that adds two numbers

```
import java.util.Scanner;  // Import the Scanner class from the java.util package for user input

public class AddTwoNumbers {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);  // Create a Scanner object to read user input

        System.out.print("Enter the first number: ");  // Prompt the user to enter the first number
        double num1 = scanner.nextDouble();  // Read the first number entered by the user

        System.out.print("Enter the second number: ");  // Prompt the user to enter the second number
        double num2 = scanner.nextDouble();  // Read the second number entered by the user

        double sum = num1 + num2;  // Calculate the sum of the two numbers

        System.out.println("The sum of " + num1 + " and " + num2 + " is: " + sum);  // Display the sum

        scanner.close();  // Close the Scanner to release resources
    }
}
```

Question 2: Write a Java Program to check whether the program is even or odd

```
import java.util.Scanner;  // Import the Scanner class from the java.util package for user input

public class EvenOddChecker {
```

```
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);  // Create a Scanner object to read user input

        System.out.print("Enter a number: ");  // Prompt the user to enter a number
        int number = scanner.nextInt();  // Read the number entered by the user

        if (number % 2 == 0) {  // Check if the remainder when dividing the number by 2 is 0
            System.out.println(number + " is even.");  // Display that the number is even
        } else {
            System.out.println(number + " is odd.");  // Display that the number is odd
        }

        scanner.close();  // Close the Scanner to release resources
    }
}
```

Question 3: Write a java program to check if a number is palindrome or not

Certainly! Here's a Java program that checks whether a given number is a palindrome or not:

```java
import java.util.Scanner;  // Import the Scanner class from the java.util package for user input

public class PalindromeChecker {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);  // Create a Scanner object to read user input

        System.out.print("Enter a number: ");  // Prompt the user to enter a number
        int number = scanner.nextInt();  // Read the number entered by the user

        int originalNumber = number;
```

```
        int reversedNumber = 0;

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

        if (originalNumber == reversedNumber) {
            System.out.println(originalNumber + " is a palindrome.");
        } else {
            System.out.println(originalNumber + " is not a palindrome.");
        }

        scanner.close();  // Close the Scanner to release resources
    }
}
```

Question 4: Write a java program to check the sum of n natural numbers

```
import java.util.Scanner;  // Import the Scanner class from the java.util package for user input

public class SumOfNaturalNumbers {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);  // Create a Scanner object to read user input

        System.out.print("Enter a positive integer n: ");  // Prompt the user to enter a positive integer
        int n = scanner.nextInt();  // Read the integer entered by the user

        if (n < 1) {
            System.out.println("Please enter a positive integer.");
```

```
        } else {
            int sum = calculateSum(n);  // Call the method to calculate the sum
            System.out.println("The sum of the first " + n + " natural numbers is: " + sum);
        }

        scanner.close();  // Close the Scanner to release resources
    }

    public static int calculateSum(int n) {
        int sum = 0;

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

        return sum;
    }
}
```

Question 5: Write a java program to check prime number or not

```
import java.util.Scanner;  // Import the Scanner class from the java.util package for user input

public class PrimeNumberChecker {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);  // Create a Scanner object to read user input

        System.out.print("Enter a positive integer: ");  // Prompt the user to enter a positive integer
        int number = scanner.nextInt();  // Read the integer entered by the user
```

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

        scanner.close();  // Close the Scanner to release resources
    }

    public static boolean isPrime(int n) {
        if (n <= 1) {
            return false;  // 1 and negative numbers are not prime
        }

        for (int i = 2; i <= Math.sqrt(n); i++) {
            if (n % i == 0) {
                return false;  // If n is divisible by any number between 2 and its square root, it's not prime
            }
        }

        return true;
    }
}
```