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Java Programs Assignment:

**C# Program to Check Whether a Given Number is Even or Odd**

import java.util.\*;

class OddEven {

public static void main(String[] args) {

int num;

System.out.println("Enter number you want");

Scanner sc = new Scanner(System.in);

num = sc.nextInt();

if(num%2==0){

System.out.println("Number you enterd is Even");

}

else{

System.out.println("Number you enterd is odd");

}

}

}

**C# Program to Print Odd Numbers in a Given Range**

class SumOfFirst50Numbers {

public static void main(String[] args) {

int sum = 0;

for (int i = 1; i <= 50; i++) {

sum += i;

}

System.out.println("Sum of the first 50 natural numbers is: " + sum);

}

}

**C# Program to Check Whether a Number is Positive or Not**

import java.util.\*;

class PosistiveNegative{

public static void main(String[] args) {

int num;

System.out.println("Enter number you want");

Scanner sc = new Scanner(System.in);

num = sc.nextInt();

if(num<0){

System.out.println("Number you enterd is Negative");

}

else{

System.out.println("Number you enterd is Positive");

}

}

}

**C# Program to Find the Largest of Two Numbers**

import java.util.\*;

class LargestNumber{

public static void main(String[] args) {

int num1, num2;

System.out.println("Enter number you want");

Scanner sc = new Scanner(System.in);

num1 = sc.nextInt();

num2 = sc.nextInt();

if(num1<num2){

System.out.println("num2 is greater");

}

else{

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

}

}

}

**C# Program to Swap Two Numbers**

import java.util.\*;

class Swap {

public static void main(String[] args) {

int num1, num2;

System.out.println("Enter number you want");

Scanner sc = new Scanner(System.in);

num1 = sc.nextInt();

num2 = sc.nextInt();

System.out.println("Numbers Before swapping");

System.out.println("Num1="+num1);

System.out.println("Num2="+num2);

int temp = num1;

num1 = num2;

num2 = temp;

System.out.println("Numbers After swapping");

System.out.println("Num1="+num1);

System.out.println("Num2="+num2);

}

}

**C# Program to Check if a Number is Divisible by 2**

import java.util.\*;

class Swap {

public static void main(String[] args) {

int num;

System.out.println("Enter number you want");

Scanner sc = new Scanner(System.in);

num = sc.nextInt();

if (num%2 == 0){

System.out.println("Number you enterd is divisible by 2");

}

else{

System.out.println("Number you enterd is not divisible by 2");

}

}

}

**C# Program to Find the Sum of All the Multiples of 3 and 5**

import java.util.Scanner;

class HelloWorld {

public static void main(String[] args) {

int num, sum = 0;

Scanner sc = new Scanner(System.in);

System.out.println("Enter Range that you want to...!");

num = sc.nextInt();

for (int i = 1; i < num; i++) {

if (i % 3 == 0 || i % 5 == 0) {

sum += i;

}

}

System.out.println("Sum of multiples of 3 and 5 below " + num + " is: " + sum);

}

}

**C# Program to Find Sum of Digits of a Number**

import java.util.Scanner;

class SumOfDigits {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

System.out.println("Enter a number:");

int num = sc.nextInt();

int sum = 0;

int originalNum = num;

while (num > 0) {

sum += num % 10;

num /= 10;

}

System.out.println("Sum of the digits of " + originalNum + " is: " + sum);

}

}

**C# Program to Reverse a Number**

import java.util.Scanner;

class ReverseNumber {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

System.out.println("Enter a number:");

int num = sc.nextInt();

int reversedNum = 0;

while (num != 0) {

int digit = num % 10;

reversedNum = reversedNum \* 10 + digit;

num /= 10;

}

System.out.println("Reversed number is: " + reversedNum);

}

}

**C# Program to Reverse a Number and Check if it is a Palindrome**

import java.util.Scanner;

class PalindromeCheck {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

System.out.println("Enter a number:");

int num = sc.nextInt();

int originalNum = num;

int reversedNum = 0;

while (num != 0) {

int digit = num % 10;

reversedNum = reversedNum \* 10 + digit;

num /= 10;

}

if (originalNum == reversedNum) {

System.out.println(originalNum + " is a palindrome.");

} else {

System.out.println(originalNum + " is not a palindrome.");

}

}

}

**C# Program to Find the Sum of Two Binary Numbers**

import java.util.Scanner;

class BinarySum {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

String binary1 = sc.nextLine();

String binary2 = sc.nextLine();

int decimal1 = Integer.parseInt(binary1, 2);

int decimal2 = Integer.parseInt(binary2, 2);

int sumDecimal = decimal1 + decimal2;

String binarySum = Integer.toBinaryString(sumDecimal);

System.out.println(binarySum);

}

}

**C# Program to Multiply Two Binary Numbers**

import java.util.Scanner;

class BinaryProduct {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

String binary1 = sc.nextLine();

String binary2 = sc.nextLine();

int decimal1 = Integer.parseInt(binary1, 2);

int decimal2 = Integer.parseInt(binary2, 2);

int productDecimal = decimal1 \* decimal2;

String binaryProduct = Integer.toBinaryString(productDecimal);

System.out.println(binaryProduct);

}

}

**C# Program to Calculate the Sum, Multiplication, Division and Subtraction of Two Numbers(use switch case)**

import java.util.Scanner;

class BasicCalculator {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

System.out.println("Enter first number:");

double num1 = sc.nextDouble();

System.out.println("Enter second number:");

double num2 = sc.nextDouble();

System.out.println("Choose operation: 1 for Sum, 2 for Multiplication, 3 for Division, 4 for Subtraction");

int choice = sc.nextInt();

double result;

switch (choice) {

case 1:

result = num1 + num2;

System.out.println("Sum: " + result);

break;

case 2:

result = num1 \* num2;

System.out.println("Multiplication: " + result);

break;

case 3:

if (num2 != 0) {

result = num1 / num2;

System.out.println("Division: " + result);

} else {

System.out.println("Cannot divide by zero.");

}

break;

case 4:

result = num1 - num2;

System.out.println("Subtraction: " + result);

break;

default:

System.out.println("Invalid choice.");

}

}

}

**C# Program to Generate Fibonacci Series**

import java.util.Scanner;

class FibonacciSeries {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

System.out.println("Enter the number of terms in the Fibonacci series:");

int terms = sc.nextInt();

int f1 = 0, f2 = 1;

System.out.print("Fibonacci Series: ");

for (int i = 0; i < terms; i++) {

System.out.print(f1 + " ");

int next = f1 + f2;

f1 = f2;

f2 = next;

}

}

}

**C# Program to Print the Factorial of a Given Number**

import java.util.Scanner;

class Factorial {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

System.out.println("Enter a number:");

int num = sc.nextInt();

long factorial = 1;

for (int i = 1; i <= num; i++) {

factorial \*= i;

}

System.out.println("Factorial of " + num + " is: " + factorial);

}

}

**C# Program to Print All the Prime Numbers between 1 to 100**

class PrimeNumbers {

public static void main(String[] args) {

System.out.println("Prime numbers between 1 and 100:");

for (int num = 2; num <= 100; num++) {

boolean isPrime = true;

for (int i = 2; i <= Math.sqrt(num); i++) {

if (num % i == 0) {

isPrime = false;

break;

}

}

if (isPrime) {

System.out.print(num + " ");

}

}

}

}

**C# Program to Find the Largest Prime Factor of a Number**

import java.util.Scanner;

class LargestPrimeFactor {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

long num = sc.nextLong();

long largestPrime = -1;

while (num % 2 == 0) {

largestPrime = 2;

num /= 2;

}

for (long i = 3; i \* i <= num; i += 2) {

while (num % i == 0) {

largestPrime = i;

num /= i;

}

}

if (num > 2) {

largestPrime = num;

}

System.out.println(largestPrime);

}

}

**C# Program to Check Whether a Given Number is Perfect Number**

import java.util.Scanner;

class PerfectNumber {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

System.out.println("Enter a number:");

int num = sc.nextInt();

int sum = 0;

for (int i = 1; i <= num / 2; i++) {

if (num % i == 0) {

sum += i;

}

}

if (sum == num) {

System.out.println(num + " is a perfect number.");

} else {

System.out.println(num + " is not a perfect number.");

}

}

}

**C# Program to Check Armstrong Number**

import java.util.Scanner;

class ArmstrongNumber {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

System.out.println("Enter a number:");

int num = sc.nextInt();

int originalNum = num;

int sum = 0;

int digits = String.valueOf(num).length();

while (num > 0) {

int digit = num % 10;

sum += Math.pow(digit, digits);

num /= 10;

}

if (sum == originalNum) {

System.out.println(originalNum + " is an Armstrong number.");

} else {

System.out.println(originalNum + " is not an Armstrong number.");

}

}

}

**C# Program to Print Armstrong Number between 1 to 1000**

class ArmstrongNumbers {

public static void main(String[] args) {

for (int num = 1; num <= 1000; num++) {

int originalNum = num;

int sum = 0;

int digits = String.valueOf(num).length();

while (num > 0) {

int digit = num % 10;

sum += Math.pow(digit, digits);

num /= 10;

}

if (sum == originalNum) {

System.out.print(originalNum + " ");

}

num = originalNum;

}

}

}

**C# Program to Generate the Sum of N Numbers**

import java.util.Scanner;

class SumOfNNumbers {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

System.out.println("Enter the value of N:");

int n = sc.nextInt();

int sum = 0;

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

sum += i;

}

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

}

}

**C# Program to Find the Sum of First 50 Natural Numbers using For Loop**

class SumOfFirst50Numbers {

public static void main(String[] args) {

int sum = 0;

for (int i = 1; i <= 50; i++) {

sum += i;

}

System.out.println("Sum of the first 50 natural numbers is: " + sum);

}

}