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**CLASS: AINT-2A**

1. Make a Calculator. Take 2 numbers (a & b) from the user and an operation as follows :

1 : + (Addition) a + b

* 2 : - (Subtraction) a - b
* 3 : \* (Multiplication) a \* b
* 4 : / (Division) a / b
* 5 : % (Modulo or remainder) a % b

Calculate the result according to the operation given and display it to the user.

import java.util.Scanner;

public class SimpleCalculator {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

// Take input for two numbers

System.out.print("Enter number 1: ");

double a = scanner.nextDouble();

System.out.print("Enter number 2: ");

double b = scanner.nextDouble();

// Display operations to the user

System.out.println("Choose an operation:");

System.out.println("1 : + (Addition)");

System.out.println("2 : - (Subtraction)");

System.out.println("3 : \* (Multiplication)");

System.out.println("4 : / (Division)");

System.out.println("5 : % (Modulo or remainder)");

// Take input for the operation choice

System.out.print("Enter operation choice: ");

int operation = scanner.nextInt();

// Perform calculation based on the operation choice

double result = 0;

switch (operation) {

case 1:

result = a + b;

break;

case 2:

result = a - b;

break;

case 3:

result = a \* b;

break;

case 4:

if (b != 0) {

result = a / b;

} else {

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

}

break;

case 5:

result = a % b;

break;

default:

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

}

// Display the result to the user

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

scanner.close();

}

}

1. Ask the user to enter the number of the month & print the name of the month. For eg - For ‘1’ print ‘January’, ‘2’ print ‘February’ & so on.

import java.util.Scanner;

public class MonthNameWithoutArray {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

// Take input for the number of the month

System.out.print("Enter the number of the month (1-12): ");

int monthNumber = scanner.nextInt();

// Check the month number and print the corresponding name

if (monthNumber == 1) {

System.out.println("January");

} else if (monthNumber == 2) {

System.out.println("February");

} else if (monthNumber == 3) {

System.out.println("March");

} else if (monthNumber == 4) {

System.out.println("April");

} else if (monthNumber == 5) {

System.out.println("May");

} else if (monthNumber == 6) {

System.out.println("June");

} else if (monthNumber == 7) {

System.out.println("July");

} else if (monthNumber == 8) {

System.out.println("August");

} else if (monthNumber == 9) {

System.out.println("September");

} else if (monthNumber == 10) {

System.out.println("October");

} else if (monthNumber == 11) {

System.out.println("November");

} else if (monthNumber == 12) {

System.out.println("December");

} else {

System.out.println("Invalid month number entered.");

}

scanner.close();

}

}

1. Write a program which will take 10 values from user if the value is even it should be count Even if the value is Odd then it will be count in odd else it will be counted as Zero.(If Else If)

import java.util.Scanner;

public class CountEvenOddZero {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

int evenCount = 0;

int oddCount = 0;

int zeroCount = 0;

System.out.println("Enter 10 integer values:");

for (int i = 0; i < 10; i++) {

int value = scanner.nextInt();

if (value == 0) {

zeroCount++;

} else if (value % 2 == 0) {

evenCount++;

} else {

oddCount++;

}

}

System.out.println("Even numbers count: " + evenCount);

System.out.println("Odd numbers count: " + oddCount);

System.out.println("Zero count: " + zeroCount);

scanner.close();

}

}

1. Write a program which take numbers achieved by students in 3 subject and find it's average is above 50 or not If it's above then 50 print “Pass” else print “Fail” .

import java.util.Scanner;

public class StudentAverage {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

// Take input for scores in three subjects

System.out.println("Enter scores achieved in three subjects:");

System.out.print("Subject 1: ");

double subject1 = scanner.nextDouble();

System.out.print("Subject 2: ");

double subject2 = scanner.nextDouble();

System.out.print("Subject 3: ");

double subject3 = scanner.nextDouble();

// Calculate average

double average = (subject1 + subject2 + subject3) / 3.0;

// Check if the average is above 50 or not and print the result

if (average > 50) {

System.out.println("Average is " + average + ". Pass");

} else {

System.out.println("Average is " + average + ". Fail");

}

scanner.close();

}

}