Task # 01:

Write a java program that takes a single character as input and tells whether it is a vowel or a consonant.

(Use Switch Statement).

public class Task1 {

public static void main(String[] args) {

Scanner scan = new Scanner(System.in);

System.out.print("Enter any alphabet : ");

char x = scan.next().charAt(0);

switch (x) {

case 'a':

case 'e':

case 'i':

case 'o':

case 'u':

case 'A':

case 'E':

case 'I':

case 'O':

case 'U':

System.out.println(x + " is vowel");

break;

default:

System.out.println(x + " is consonant");

}

scan.close();

}

}

Task # 02:

Write a java program that performs arithmetic operations on two numbers after taking 3 runtime arguments;

1st number, 2nd number and the operators (+, -, /, \*) and prints the result.

import java.util.Scanner;

class Task2 {

public static void main(String[] args) {

char operator;

Double n1, n2, result;

Scanner input = new Scanner(System.in);

System.out.println("Choose an operator: +, -, \*, / or %");

operator = input.next().charAt(0);

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

n1 = input.nextDouble();

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

n2 = input.nextDouble();

switch (operator) {

case '+':

result = n1 + n2;

System.out.println(n1 + " + " + n2 + " = " + result);

break;

case '-':

result = n1 - n2;

System.out.println(n1 + " - " + n2 + " = " + result);

break;

case '\*':

result = n1 \* n2;

System.out.println(n1 + " \* " + n2 + " = " + result);

break;

case '/':

result = n1 / n2;

System.out.println(n1 + " / " + n2 + " = " + result);

break;

case '%':

result = n1 % n2;

System.out.println(n1 + " / " + n2 + " = " + result);

break;

default:

System.out.println("Invalid operator!");

break;

}

input.close();

}

}

Task # 03:

Write a java program which check whether a number is prime or not.

import java.util.Scanner;

class Task3 {

public static void main(String[] args) {

Scanner input = new Scanner(System.in);

System.out.println("enter a number ");

int x = input.nextInt();

for (int i = (x - 1); i > 1; i--) {

if (x % i == 0) {

System.out.println("Not Prime");

break;

}

if (i == 2) {

System.out.println("Prime");

}

}

}

}

Task # 04:

Write a java program that takes five subjects marks of a student and calculate their percentage and grade.

import java.util.Scanner;

public class Task4 {

public static void main(String[] args) {

Scanner scan = new Scanner(System.in);

float total = 0;

float perc = 0;

System.out.println("Enter the OOP marks");

float oop = scan.nextFloat();

System.out.println("Enter the English marks");

float eng = scan.nextFloat();

System.out.println("Enter the AP marks");

float phy = scan.nextFloat();

System.out.println("Enter the PF marks");

float pf = scan.nextFloat();

System.out.println("Enter the Calculus marks");

float calc = scan.nextFloat();

System.out.println("Enter the total marks");

float t = scan.nextFloat();

total = oop + eng + phy + pf + calc;

perc = (total / t) \* 100;

if (perc <= 50) {

System.out.println("Your grade is C");

} else if (perc <= 60) {

System.out.println("Your grade is B");

} else if (perc >= 70 || perc <= 80) {

System.out.println("Your grade is A");

} else if (perc >= 90 || perc <= 100) {

System.out.println("Your grade is A+");

}

System.out.println("Your percentage: " + perc + "%");

}

}