**QUESTION 1 : SIMPLE COMPUTER APPLICATION :**

import java.util.Scanner;

class Main {

public static void main(String[] args) {

char op;

Double num1, num2, result;

Scanner input = new Scanner(System.in);

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

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

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

num1 = input.nextDouble();

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

num2 = input.nextDouble();

switch (op) {

case '+':

result = num1 + num2;

System.out.println(num1 + " + " + num2 + " = " + result);

break;

case '-':

result = num1 - num2;

System.out.println(num1 + " - " + num2 + " = " + result);

break;

case '\*':

result = num1 \* num2;

System.out.println(num1 + " \* " + num2 + " = " + result);

break;

case '/':

result = num1 / num2;

System.out.println(num1 + " / " + num2 + " = " + result);

break;

default:

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

break;

}

input.close();

}

}

**QUESTION 2 : NUMBER GUESSING GAME**

import java.util.Scanner;

import java.util.Random;

public class NumberGuessingGame {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

Random randomGenerator = new Random();

int lower = 1;

int upper = 100;

int target = randomGenerator.nextInt(upper - lower + 1) + lower;

int attempts = 0;

boolean correctguess = false;

System.out.println("I've chosen a random number between " + lower + " and " + upper + ". Try to guess it.");

while (!correctguess) {

System.out.print("Enter your guess: ");

int ug = scanner.nextInt();

attempts++;

if (ug < lower || ug > upper) {

System.out.println("Please enter a number between " + lower + " and " + upper + ".");

} else if (ug < target) {

System.out.println("Too low! Try again.");

} else if (ug > target) {

System.out.println("Too high! Try again.");

} else {

correctguess = true;

System.out.println("Congratulations! You guessed the number " + target + " correctly in " + attempts + " attempts.");

}

}

scanner.close();

}

}