/\*\* Basic Calculator program; demo menu choices with conditional execution \*/

import java.util.\*;

public class Calculator {

public static void main(String[] args) {

Scanner keyboard = new Scanner(System.in);

int choice = 0;

double num1 = 0, num2 = 0;

boolean imaginary = false;

System.out.println("\t\t Calculator \n");

String menu = "\n1. Add\n2. Subtract\n3. Multiply\n4. Divide\n5. SquareRoot;

menu += \n6. Quit\n\nChoice: ";

do {

System.out.print(menu);

choice = keyboard.nextInt();

switch (choice) {

case 1:

System.out.print("Enter 2 numbers seperated by a space to see their sum: ");

num1 = keyboard.nextInt();

num2 = keyboard.nextInt();

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

break;

case 2:

System.out.print("Enter 2 numbers seperated by a space to see their difference: ");

num1 = keyboard.nextInt();

num2 = keyboard.nextInt();

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

break;

case 3:

System.out.print("Enter 2 numbers seperated by a space to see their product: ");

num1 = keyboard.nextInt();

num2 = keyboard.nextInt();

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

break;

case 4:

System.out.print("Enter 2 numbers seperated by a space to see their quotient: ");

num1 = keyboard.nextInt();

num2 = keyboard.nextInt();

if (num2 != 0) {

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

} else {

System.out.println("Division by zero not allowed!!");

}

break;

case 5:

System.out.print("Enter a number to see its square root: ");

imaginary = false;

num1 = keyboard.nextInt();

if (num1 < 0)

imaginary = true;

num2 = Math.sqrt(Math.abs(num1));

System.out.print("The square root of of " + num1 + " is " + num2);

if (imaginary)

System.out.print("i");

System.out.println();

break;

case 6:

System.out.println("Quitting");

break;

default: System.out.println("Invalid entry!!!");

}

} while(choice != 6);

}

}