EX: 3 NAME: NITHISH GOWTHAM.R

DATE: 4.1.23 ROLL NO:22CSEA49

CALCULATE THE ROOTS OF QUADRATIC EQUATION

PROGRAM:

#Program to find the roots of a quadratic equation

import math

a=int(input("enter a value of quadratic equation:"))

b=int(input("enter b value of quadratic equation:"))

c=int(input("enter c value of quadratic equation:"))

discriminant=(b\*b)-(4\*a\*c)

if(discriminant>0):

root1=(-b+math.sqrt(discriminant)/(2\*a))

root2=(-b-math.sqrt(discriminant)/(2\*a))

print("Two distinct real roots exists:root1=%F and root2=%2F"%(root1,root2))

elif(discriminant==0):

root1=root2=-b/(2\*a)

print("Two equal and real roots exists:root1=%2F and root2=%2F%"(root1,root2))

elif(discriminant<0):

root1=root2=-b/(2\*a)

print("Two distinct complex roots exists:root1=%2F+%2F and root2=%2F-%- 2f"%(root1,imaginary,root2,imaginary))

OUTPUT:

enter a value of quadratic equation:25

enter b value of quadratic equation:30

enter c value of quadratic equation:-15

Two distinct real roots exists:root1=-29.020204 and root2=-30.979796

VOTING ELIGIBILITY

PROGRAM:

#Program to find the voter eligibility

age=int(input("enter age: "))

if(age>=18):

print("Eligible")

else:

print("Not Eligible")

OUTPUT:

enter age: 19

Eligible

enter age: 17

Not Eligible

CHECK WHETHER UPPERCASE OR LOWERCASE

PROGRAM:

#Program to find whether it is an Uppercase or Lowercase characters

ch=input("enter a char: ")

if(ch>='A' and ch<='Z'):

print("you entered Uppercase alphabet")

elif(ch>='a' and ch<='z'):

print("you entered Lowercase alphabet")

OUTPUT:

enter a char: A

you entered Uppercase alphabet

enter a char: c

you entered Lowercase alphabet

PRINT THE DAYS IN THE WEEK

PROGRAM:

num=int(input("enter a number: "))

if(num==1):

print("sunday")

elif(num==2):

print("monday")

elif(num==3):

print("tuesday")

elif(num==4):

print("wednesday")

elif(num==5):

print("thursday")

elif(num==6):

print("friday")

elif(num==7):

print("saturday")

else:

("Please enter any weekday number(1-7)")

OUTPUT:

enter a number: 7

Saturday

enter a number: 4

Wednesday

SMALLEST AMONG 3 NUMBERS

PROGRAM:

a=int(input("enter a "))

b=int(input("enter b "))

c=int(input("enter c "))

if (a<b and a<c):

    print("a is smallest")

if (b<c and b<a):

    print("b is smallest")

if (c<a and c<b):

    print ("c is smallest")

OUTPUT:

enter a 2

enter b 1

enter c 3

b is smallest

ISUPPER PROGRAM

PROGRAM:

string = input("enter something: ")

if string.isupper():

    print("\*\*")

else:

    print("U")

OUTPUT:

enter something: O

\*\*

enter something: n

U