EX 3- Questions on Decision making Statements

1.Calculate the Roots of Quadratic equation:

a=int(input("Enter a valuie of quadratic equation: "))

b=int(input("Enter b valuie of quadratic equation: "))

c=int(input("Enter c valuie of quadratic equation: "))

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

if (discriminant>0):

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

root2=(-b+(discriminant)/2\*a)

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

if (discriminant==0):

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

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

elif(discriminant<0):

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

imaginary=(-discriminant)/(2\*a)

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

OUTPUT:

Enter a valuie of quadratic equation: 1

Enter b valuie of quadratic equation: 5

Enter c valuie of quadratic equation: 6

two distinct real roots exists:root1=-4.500000 and root2=-4.500000

2.Voting Eligibility

Prgm:

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

if(age>=18):

print("Eligible")

else:

print("Not eligible")

OUTPUT:

enter age 12

Not eligible

enter age 18

Eligible

3.Read a character. Check whether it is upper or lower

Prgm:

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:c

you entered lowercase alphabet

Group 6

Print the days of the week with (1- 7)

1-SUN, 2-MON......7- SAT

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:

print("enter a valid number")

OUTPUT:

Enter a number 2

monday

Smallest of three numbers.

Prgm:

num1=int(input("enter the first number"))

num2=int(input("enter the second number"))

num3=int(input("enter the third number"))

if(num1<num2)and(num1<num3):

print(num1,"is smallest")

elif(num2<num3):

print(num3,"is smallest")

OUTPUT:

enter the first number 20

enter the second number34

enter the third number43.

Read a Character. if it is Lower , Print \*\* else print U

Prgm:

ch=input("enter a character")

if(ch.islower()):

print("\*\*")

else:

print("U")

OUTPUT:

enter a character h

\*\*