**Programing Fundamental Lab**

**Assignment # 03**

1. months = ['January','Feburary','March','April','May','June','July','August','September','October','November', 'December']

m = input("Enter name of month:")

def days(m):

for i in months:

if m == months[0] or m == months[2] or m ==months[4] or m == months[6] or m==months[7] or m==months[9] or m==months[11]:

return ('31')

if m == months[3] or m == months[5] or m == months[8] or m== months[10]:

return ('30'

if m ==months[1]:

return ('28/29')

print ('No. of days:',days(m))

1. s = input("Enter number:")

def verify(s):

for i in s:

if type(s)!= int:

print('The string is not an integer')

else:

print("The string is an integer")

verify(s)

1. def sen():

sen = input("Enter Sentence:")

uppercase= ['A','B','C','D','E','F','G','H','I','J','K','L','M','N','O','P','Q','R','S','T','U','V','W','X','Y','Z']

lowercase= ['a','b','c','d','e','f','g','h','i','j','k','l','m','n','o','p','q','r','s','t','u','v','w','x','y','z']

count1 = 0

count2 = 0

for c in sen:

if c in uppercase:

count1 +=1

if c in lowercase:

count2 +=1

print('The uppercase are',count1)

print('The lowercase are',count2)

1. day = int(input("Input birthday: "))

month = str(input("Input month of birth (e.g. march, july etc): "))

def astro\_sign(day,month):

if month == 'Mar':

if (day < 21):

print ("Your Astrological sign is :",'Pisces')

else:

print ("Your Astrological sign is :",'Aries')

if month == 'Apr':

if (day <= 20):

print ("Your Astrological sign is :",'Aries')

else:

print ("Your Astrological sign is :",'Taurus')

if month == 'May':

if (day < 21):

print ("Your Astrological sign is :",'Taurus')

else:

print ("Your Astrological sign is :",'Gemini')

if month == 'Jun':

if (day < 21):

print ("Your Astrological sign is :",'Gemini')

else:

print ("Your Astrological sign is :",'Cancer')

if month == 'Jul':

if (day < 23):

print ("Your Astrological sign is :",'Cancer')

else:

print ("Your Astrological sign is :",'Leo')

if month == 'Aug':

if (day < 23):

print ("Your Astrological sign is :",'Leo')

else:

print ("Your Astrological sign is :",'Virgo')

if month == 'Sep':

if (day < 23):

print ("Your Astrological sign is :",'Virgo')

else:

print ("Your Astrological sign is :",'Libra')

if month == 'Oct':

if (day < 23):

print ("Your Astrological sign is :",'Libra')

else:

print ("Your Astrological sign is :",'Scorpio')

if month == 'Nov':

if (day < 22):

print ("Your Astrological sign is :",'Scorpio')

else:

print ("Your Astrological sign is :",'Sagittarius')

if month == 'Dec':

if(day <22):

print ("Your Astrological sign is :",'Sagittarius')

else:

print ("Your Astrological sign is :",'Capricon')

if month == 'Jan':

if(day <20):

print ("Your Astrological sign is :",'Capricon')

else:

print ("Your Astrological sign is :",'Aquarius')

if month == 'Feb':

if (day <= 19):

print ("Your Astrological sign is :",'Aquarius')

else:

print ("Your Astrological sign is :",'Pisces')

astro\_sign(day,month)

1. from math import sqrt

a = float(input("Enter value of a :"))

b = float(input("Enter value of b :"))

c = float(input("Enter value of c :"))

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

if d < 0:

print("Roots are complex.")

elif d == 0:

e = (-b)/(2\*a)

print(e)

else:

f = ((-b)+sqrt(d))/(2\*a)

g = ((-b)-sqrt(d))/(2\*a)

print(f," and ",g)

1. mag = float(input("Enter magnitude: "))

def earth\_quake():

if mag < 2.0:

print ("earthquake is considered to be a", "Micro")

if mag < 3.0:

print ("earthquake is considered to be a","Very Minor")

if mag < 4.0:

print ("earthquake is considered to be a","Minor")

if mag < 5.0 >= 5:

print ("earthquake is considered to be a","Light")

if mag <= 6.0:

print ("earthquake is considered to be a","Moderate")

if mag < 7.0:

print ("earthquake is considered to be a","Strong")

if mag <= 8.0:

print ("earthquake is considered to be a","Major")

if mag <= 10.0:

print ("earthquake is considered to be a","Great")

if mag > 10.0:

print ("earthquake is considered to be a","Meteoric")

earth\_quake()

1. a=[]

b=int(input("input 10 num: "))

for i in range(b):

b=int(input("input 10 num: "))

a.append(b)