

Date: 5/04/2023

python programming for Business Analytics

Slot: C

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Assignment-1

1. Write a python program using function to calculate the Simple Interest
Suppose the customer is a Series Citizen who key is being offered 15%
of Interest

Enter the principal amount: 200000

Enter the no. of years: 3

Grades (M/F): m

Ans. Def Simple Interest (P, r, t)

$$SI = (P * r * t) / 100$$

return S:

Simple Interest (200000, 0.15, 3)

Sample output

Interest : 600000//.

2. In an organisation they decide to give bonus to all the output on New Year. A 5% bonus on Salary is given to the grade A workers and 10% bonus on Salary to the grade B. workers write a python program to enter the Salary and grade of the Employee?

Ans. `a = input('Enter your name here:')`

`b = int(input('your Salary here:'))`

`c = input('your grade here (M/F):')`

`if b < 10000 and c == 'M':`

`print (str(a) + ' your Salary with bonus is ' + str(b * 1.05))`

`elif b < 10000 and c == 'F':`

`print (str(a) + ' your Salary with bonus is ' + str(b * 1.12))`

`if b >= 10000 and c == 'M':`

`print (str(a) + ' your Salary with bonus is ' + str(b * 1.05))`

`elif b >= 10000 and c == 'F':`

`print (str(a) + ' your Salary with bonus is ' + str(b * 1.1))`

Sample output

Enter the Grade : B

Enter the Salary : 50000

Bonus : 5000.0

Total Salary : 55000.0

3. The year is divided into four seasons Spring Summer fall and winter while the count dates that the seasons change very little bit from year to year because of the way that the calendar is constructed.

Ans. Program

Month = Input ("Input the month")

Day = Input ("Input the day")

If month = ("January", "February", "March")

Season = "Winter"

Else month in ("April", "May", "June")

Season = "Spring"

Else month in ("July", "August", "September");

Season = "Summer"

Else

Season = "Autumn"

If (month = "March") and (day < 19);

Season = 'Spring'

Else (month = "June") and (day < 20);

Season = Summer

elif (month == September) and (day > 01);

Season = 'autumn'

elif (month == "December") and (day > 20).

Season = "winter"

Print ("Season is Season).

Output

Input the month : April

Input the day : 15

Season is Spring

4. Write a python code for two patterns.

Ans. 1. Star pattern

Def print(n):

for m in range(n):

for j in range(a, A+1);

print ("x" end = " ")

print ("|x")

n=5

pyfont(n).

output

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     * *
    *  *  *
   *  *  *  *
  *  *  *  *  *

```

ii) Triangle pattern

def triangle(n):

k=n-1

for i in range(0,n):

for j in range(0,k):

print (end = " ")

k=k-1

for i in range(a,n)

print ("n" ,end=" ")

print ("|x")

n=5

triangle(n).

output

```

      *
     * *
    *  *  *
   *  *  *  *
  *  *  *  *  *

```