

ASSIGNMENT-1

1) Write a python program using function to calculate the Simple interest Suppose the Customer.

Enter the principal Amount: 200000
Enter the no of Years=3.

```
def Simple interest(p, r, t):
```

```
    Si = (p * r * t) / 100  
    return Si
```

```
Simple interest (20000, 01, 3)
```

Simple Output

interest: 600000

2) In an organisation they decide to give bonus to all the employee on New Year. 5% bonus on Salary is given to the grade A workers and 10% bonus

Sol:- Program:-

```
a = input("Enter your name here")
```

```
b = int(input("Your salary here"))
```

```
c = input("Your gender here (M/F):")
```

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

```
    print(f"(str(a) + your salary with bonus is + str(b * 1.05))")
```

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

if $b > 1000$ and $c = m$

print(str(a) + "your salary with bonus is" + str($b * 1.05$))

elif $b < 1000$ and $c = f$

print(str(a) + "your salary with bonus is" + str($b * 1.1$))

Sample output:-

Enter the Grade B

Enter the Salary 5000

Bonus = 5000.0

Total Salary = 55000.0.

③

The year is divided into four seasons spring, fall, and winter. While the dates that the seasons change vary a little bit from year to year because of the way.

Program:-

Month = input("Input the month")

day = input("Input the day")

if month in ("January", "February", "March")
Season = "Winter"

elif month in ("April", "May", "June")
Season = "Spring"

elif season = "Autumn"

If $b \geq 1000$ and $c == 'M'$

Print($\text{str}(a)$ + "your salary with bonus is" + $\text{str}(b * 1.05)$)

elif $b \geq 1000$ and $c == 'F'$

Print($\text{str}(a)$ + "your salary with bonus is" + $\text{str}(b * 1.1)$)

Sample output:-

Enter the Grade B

Enter the Salary 5000

Bonus = 5000.0

Total Salary = 55000.0.

③

The year is divided into four seasons spring fall and winter while the dates that the seasons change vary a little bit from year to year because of the way.

Program:-

Month = input("Input the month")

day = input("Input the day")

If month in ("January", "February", "March")
Season = "Winter"

elif month in ("April", "May", "June"):
Season = "Spring"

elif Season = "Autumn"


```
if (month = "March") and (day > 19),  
    Season = 'Spring'
```

```
elif (month = "June") and (day > 20);  
    Season = 'Summer'
```

```
elif (month = "September") and (day > 21)  
    Season = autumn
```

```
elif (month = "December") and (day > 20)  
    Season = 'winter'
```

```
print ("Season's" . Season).
```

Output:-

Input the month: April

Input the Day = 15

Season is : Spring

Q) write a python code for any two patterns.

Soln i) Star pattern:-

```
def PyPatt(n);  
for i in range (n);  
for j in range (0, i+1);  
    print ("*" and " ")  
    print (" ")  
n=5  
PyPatt(n)
```

Output:-

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

ii) Triangle pattern:-

```
def triangle(n):  
    k = n - 1  
    for i in range(0, n):  
        for j in range(0, i):  
            print(end = " ")  
            k = k - 1  
        for j in range(0, i + 1):  
            print("* ", end = " ")  
        print("\n")  
    n = 5  
    triangle(n)
```

Output:-

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