

f-string

f-string or format string, this is introduced in python 3.8 version.

f"format"

in format string, string contain formatting characters, these characters are defined using {} (replacement field)

Example:

```
a=100
b=200
print(f'{a},{b}')
print(f'sum of {a} and {b} is {a+b}')
c=10
print(f'{c:d},{c:o},{c:x},{c:b}')
d=1.5
print(f'{d}')
print(f'{d:f},{d:e}')
print(f'{d:.2f}')
e="python"
print(f'{e}')
```

Output:

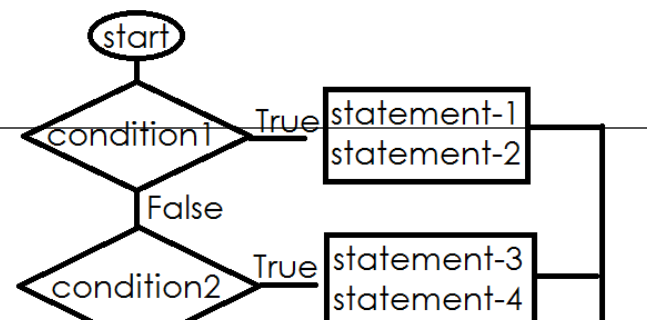
```
100,200
sum of 100 and 200 is 300
10,12,a,1010
1.5
1.500000,1.500000e+00
1.50
Python
```

If..elif..else (if..else ladder)

Using more than one conditional statement

Syntax:

If <condition1>:



| | |
|---|--|
| <pre> Statement-1 Statement-2 elif <condition2>: Statement-3 Statement-4 elif <condition3>: Statement-5 Statement-6 else: Statement-7 If condition1 is True, PVM executes Statement-1,Statement- 2 If condition1 is False and condition2 is True, PVM executes Statement-3,Statement-4 If condition1,condition2 are False and condition3 is True, PVM executes statement-5,statement-6 If all conditions are False PVM executes statement-7 </pre> | |
|---|--|

Example:

Write a program to find max of 3 numbers

```

n1=int(input("Enter First Number"))
n2=int(input("Enter Second Number"))
n3=int(input("Enter Third Number"))
if n1>n2 and n1>n3:
    print(f'Max is {n1}')
elif n2>n1 and n2>n3:
    print(f'Max is {n2}')
elif n3>n1 and n3>n2:
    print(f'Max is {n3}')
else:
    print("Equal")

```

Output

Enter First Number40
Enter Second Number60
Enter Third Number10
Max is 60

<https://www.hackerrank.com/challenges/py-if-else/problem?isFullScreen=false>

```
n=int(input())
if n%2!=0:
    print("Weird")
elif n>=2 and n<=5:
    print("Not Weird")
elif n>=6 and n<=20:
    print("Weird")
else:
    print("Not Weird")
```

Example:

```
# Elg to Vote or Not
name=input("Enter Name")
age=int(input("Enter Age"))
if age>=18:
    print(f'{name} is Elg')
else:
    print(f'{name} is not Elg')
```

Example:

```
# Find Even or Odd
num=int(input("Enter any number"))
if num%2==0:
    print(f'{num} is Even')
else:
    print(f'{num} is Odd')
```

Example:

```
# Input number is divisible with 7 or not
```

```
num=int(input("Enter any number"))
if num%7==0:
    print(f'{num} is div with 7')
else:
    print(f'{num} is not div with 7')
```

Example:

Multiples of 5 or not

```
num=int(input("Enter any number"))
if num%5==0:
    print("Hello")
else:
    print("Bye")
```

Example:

Q8. Write a program to calculate the electricity bill (accept number of unit from user) according to the following criteria :

| Unit | Price |
|---|----------------|
| First 100 units | no charge |
| Next 100 units | Rs 5 per unit |
| After 200 units | Rs 10 per unit |
| (For example if input unit is 350 than total bill amount is Rs2000) | |

```
units=int(input("Enter Units"))
if units<=100:
    amt=0
elif units>100 and units<=200:
    amt=5*(units-100)
elif units>200:
    amt=0+500+(units-200)*10

print(f'Bill Amount {amt}')
```

e

Q2. Write a program to accept the cost price of a bike and display the road tax to be paid according to the following criteria :

| Cost price (in Rs) | Tax |
|-----------------------|------|
| > 100000 | 15 % |
| > 50000 and <= 100000 | 10% |
| <= 50000 | 5% |

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Q1. Write a program to accept percentage from the user and display the grade according to the following criteria:

| Marks | Grade |
|-----------------|-------|
| > 90 | A |
| > 80 and <= 90 | B |
| >= 60 and <= 80 | C |
| below 60 | D |

Q9. Accept any city from the user and display monument of that city.

| <u>City</u> | <u>Monument</u> |
|-------------|-----------------|
| Delhi | Red Fort |
| Agra | Taj Mahal |
| Jaipur | Jal Mahal |

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