

If..elif..else

This syntax allows to check multiple conditions

```
If <condition1>:  
    Statement-1  
elif <condition2>:  
    statement-2  
elif <condition3>:  
    statement-3  
..  
else:  
    statement-4
```

if condition1 True, it execute statement-1

if condition1 False, condition2 is True is Statement-2

if condition1,condition2 False, condition3 is True statement-3

if all conditions are false, it execute else block.

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

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

How to input more than one value using input function?

Input() read the value from keyboard and return that value as string (OR)
input() function read value as string type
Input function read one value.

```
>>> a=input()
10
>>> print(a)
10
>>> x=input()

>>> x="10"
>>> y="10 20"
>>> z=input()
10 20
>>> print(z)
10 20
>>> print(type(z))
<class 'str'>
>>>
```

split()

String provides a method called split
This method split string into number of sub strings using separator
split(sep=None), the default separator used by split method is None

```
>>> p=y.split(" ")
>>> print(p)
['10', '20']
>>> m,n=p
>>> print(m)
10
>>> print(n)
20
>>>
```

```
# write a program to add two number
# input : 100 200
# output: 300
```

```
a=input()
n1,n2=a.split(" ") # ==> ['100','200']
c=int(n1)+int(n2)
print(f'sum is {c}')
```

<https://www.codechef.com/problems/HS08TEST>

```
amt,bal=input().split(" ")
amt=float(amt)
bal=float(bal)
if amt%5==0 and amt+0.50<bal:
    bal=bal-(amt+0.50)
    print(f'{bal:.2f}')
elif amt%5!=0:
    print(f'{bal:.2f}')
elif amt%5==0 and amt+0.50>bal:
    print(f'{bal:.2f}')
```

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 number of units")) # 500
total=0
if units<=100:
    total=0
elif units>100 and units<=200:
    total=(units-100)*5
elif units>200:
    total=(100*5)+(units-200)*10

print(f'Total Bill {total}')
```

Nested if

If inside if is called nested if (OR) if within if (OR) if followed by if is called nested if

Syntax:

```
If <condition1>:  
    If <condition2>:  
        Statement-1  
    else:  
        Statement-2  
Else:  
    Statement-3
```