

# 07-11-2025

## Conditional Statement

.if .else .nested if .if elif else

```
In [1]: if True:
        print('Data Science')
```

Data Science

```
In [2]: if False:
        print('Data Science')
        print('bye for now')
```

bye for now

```
In [3]: if True:
        print('Data Science')
        print('bye for now')
```

Data Science

bye for now

```
In [4]: if True:
        print('Data Science')
        else:
        print('bye for now')
```

Data Science

```
In [5]: if False:
        print('Data Science job')
        else:
        print('no job')
```

no job

```
In [6]: x = 4
        r = x % 2

        if r == 0:
        print('Even number')
```

Even number

```
In [7]: x = 5
        r = x % 2

        if r == 0:
        print('Even number')
```

```
In [8]: x = 5
        r = x % 2
```

```
if r !=0:  
    print('Odd number')
```

Odd number

```
In [9]: x = 7  
        r = x % 2  
  
        if r == 1:  
            print('Odd number')
```

Odd number

```
In [10]: x = 5  
         r = x % 2  
  
         if r == 0:  
             print('Even number')
```

```
print('odd number')
```

odd number

```
In [11]: x = 4  
         r = x % 2  
  
         if r == 0:  
             print('Even number')
```

```
print('odd number')
```

Even number

odd number

```
In [12]: x = 9  
         r = x % 2  
  
         if r == 0:  
             print('Even number')
```

```
if r == 1:  
    print('odd number')
```

odd number

```
In [13]: x = 8  
         r = x % 2  
  
         if r == 0:  
             print('Even number')
```

```
else:  
    print('odd number')
```

Even number

```
In [14]: x = 9  
         r = x % 2
```

```
if r != 0:
    print('odd number')

else:
    print('even number')
```

odd number

```
In [15]: x = 3
         r = x % 2

         if r == 0:
             print('Even number')
             if x>5:
                 print('greater number')

         else:
             print('Odd Number')
```

Odd Number

```
In [16]: x = 4
         r = x % 2

         if r == 0:
             print('Even number')

             if x>5:
                 print('greater number')

         else:
             print('Odd Number')
```

Even number

```
In [17]: x = 4
         r = x % 2

         if r == 0:
             print('Even number')

             if x>5:
                 print('greater number')
             else:
                 print('lesser number')

         else:
             print('Odd Number')
```

Even number

lesser number

```
In [18]: x = 13
         r = x % 2

         if r == 0:
             print('Even number')
```

```
    if x>5:
        print('greater number')
    else:
        print('lesser number')

else:
    print('Odd Number')
```

Odd Number

```
In [19]: x = 3

if x == 1:
    print('one')
if x == 2:
    print('Two')
if x == 3:
    print('Three')
if x == 4:
    print('four')
```

Three

```
In [20]: x = 1

if x == 1:
    print('one')
elif x == 2:
    print('Two')
elif x == 3:
    print('Three')
elif x == 4:
    print('four')
```

one

```
In [21]: x = 5

if x == 1:
    print('one')

elif x == 2:
    print('Two')
elif x == 3:
    print('Three')
elif x == 4:
    print('four')

else:
    print('number not found')
```

number not found

```
In [26]: age = 19
if age > 18: print("Eligible to Vote.")
```

Eligible to Vote.

## 07-11-2025 Geeks for Geeks tasks

```
In [27]: age=19
         if age >18:
             print('eligible to vote')
         else:
             print ('not eligible to vote')
```

eligible to vote

```
In [28]: age=18
         if age >18:
             print('eligible to vote')
         else:
             print ('not eligible to vote')
```

not eligible to vote

```
In [29]: age=10
         if age <=12:
             print ('travel for free')
         else:
             print('pay for the ticket')
```

travel for free

```
In [30]: #short hand if else
         marks=45
         res="pass" if marks>=40 else "fail"
         print(f"result: {res}")
```

result: pass

```
In [31]: age=25
         if age <=12:
             print ('child')
         elif age<=19:
             print ('teenager')
         elif age <=35:
             print('young adult')
         else:
             print ('adult')
```

young adult

```
In [33]: age=70
         is_member=True
         if age>= 60:
             if is_member:
                 print('30% senior discount')
             else:
                 print ('20% senior discount')
         else:
             print('not eligible for senior discount')
```

30% senior discount

```
In [34]: age=20
s= "adult" if age >=18 else "minor"
print (s)
```

adult

```
In [36]: number=3
match number:
    case 1:
        print('one')
    case 2|3:
        print('two or three')
    case _:
        print('other numbers')
```

two or three

```
In [37]: j_angry=True
s_angry=True
if (j_angry & s_angry==True):
    print('you are in trouble')
else:
    print('you are not in trouble')
```

you are in trouble

```
In [38]: j_angry=True
s_angry=False
if (j_angry & s_angry==True):
    print('you are in trouble')
else:
    print('you are not in trouble')
```

you are not in trouble

```
In [39]: x=4
r=x%2
if r==0:
    print('number is even')
else:
    print('number is odd')
```

number is even

```
In [40]: x=5
r=x%2
if r==0:
    print('number is even')
else:
    print('number is odd')
```

number is odd

```
In [41]: a=10
if a>100 :
    print('Big')
else:
    print('Number')
```

Number

```
In [42]: a=101
         if a>100 :
             print('Big')
         else:
             print('Number')
```

Big

```
In [43]: n=15
         r=n%2
         if r==0:
             print('true')
         else:
             print('false')
```

false

```
In [44]: n=14
         r=n%2
         if r==0:
             print('true')
         else:
             print('false')
```

true

```
In [45]: a=5
         b=2
         c=3
         if a>=b and a>=c:
             print(a)
         elif b>=a and b>=c:
             print(b)
         elif c>=a and c>=b:
             print(c)
```

5

```
In [47]: a=int(input('1st number'))
         b=int(input('2nd number'))
         operator=int(input('enter the operator'))
         if(operator==1):
             print(a+b)
         elif(operator==2):
             print(b-a)
         elif(operator==3):
             print(a*b)
         else:
             print ('invalid')
```

50

In [ ]:

In [ ]: