

# Conditional statement

```
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]: x=4  
r=x%2  
if r==0:  
    print('even number')
```

even number

```
In [4]: x=5  
r=x%2  
if r==0:  
    print('even number')  
if r==1:  
    print('odd number')
```

odd number

```
In [5]: if True:  
    print('Data Science')  
else:  
    print('no Data science')
```

Data Science

```
In [6]: if False:  
    print('Data Science')  
else:  
    print('no Data science')
```

no Data science

```
In [7]: x=8  
r=x%2  
if r==0:  
    print('even number')  
else:  
    print('odd number')
```

even number

```
In [8]: x=9  
r=x%2  
if r==0:  
    print('even number')  
else:  
    print('odd number')
```

```
odd number
```

## Nested if

```
In [9]: 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 [10]: 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 [11]: x=10
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
greater number
```

## elif statement

```
In [12]: x=1
if x==1:
    print('one')
elif x==2:
    print('two')
elif x==3:
    print('three')
elif x==4:
    print('four')
```

one

```
In [13]: x=1
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')
```

one

```
In [14]: age=19
if age>18:
    print('eligible to vote')
else:
    print('not eligible to vote')
```

eligible to vote

```
In [15]: age=18
if age>18:
    print('eligible to vote')
else:
    print('not eligible to vote')
```

not eligible to vote

```
In [16]: age=10
if age<=12:
    print('Travel for free')
else:
    print('Pay for the ticket')
```

Travel for free

```
In [17]: marks=45
res="pass" if marks>=40 else "fail"
print(f"result:{res}")
```

result:pass

```
In [20]: age=25
if age<=12:
    print('child')
elif age<=19:
    print('teenager')
elif age<=35:
    print('young adult')
else:
    print('adult')
```

young adult

```
In [21]: 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 [22]: age=20
s="adult" if age>=18 else "minor"
print(s)
```

adult

```
In [23]: number=3
match number:
    case 1:
        print('one')
    case 2|3:
        print('two or three')
    case _:
        print('other numbers')
```

two or three

```
In [24]: 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 [27]: a=10
if a>100:
    print('Big')
else:
    print('Number')
```

Number

```
In [28]: a=101
if a>100:
    print('Big')
else:
    print('Number')
```

Big

```
In [29]: n=15
r=n%2
if r==0:
    print('True')
else:
    print('False')
```

False

```
In [30]: n=14
r=n%2
if r==0:
    print('True')
```

```
    else:  
        print('False')
```

True

```
In [40]: 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 [33]: a=int(input("enter number"))  
b=int(input("enter number"))  
c=int(input("enter number"))  
if(c==1):  
    print(a+b)  
elif(c==2):  
    print(b-a)  
elif(c==3):  
    print(a*b)  
else:  
    print('invalid')
```

60

```
In [ ]:
```