

```
In [2]: age = 20

if age >= 18:
    print("Eligible to vote.")
```

Eligible to vote.

```
In [3]: age = 19
if age > 18: print("Eligible to Vote.")
```

Eligible to Vote.

```
In [4]: age = 10

if age <= 12:
    print("Travel for free.")
else:
    print("Pay for ticket.")
```

Travel for free.

```
In [5]: marks = 45
res = "Pass" if marks >= 40 else "Fail"

print(f"Result: {res}")
```

Result: Pass

```
In [6]: age = 25

if age <= 12:
    print("Child.")
elif age <= 19:
    print("Teenager.")
elif age <= 35:
    print("Young adult.")
else:
    print("Adult.")
```

Young adult.

```
In [7]: 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 a senior discount.")
```

30% senior discount!

```
In [8]: # Assign a value based on a condition
age = 20
s = "Adult" if age >= 18 else "Minor"
```

```
print(s)
```

Adult

```
In [9]: number = 2

match number:
    case 1:
        print("One")
    case 2 | 3:
        print("Two or Three")
    case _:
        print("Other number")
```

Two or Three

```
In [12]: if True:
        print('hello')
```

hello

```
In [13]: if False:
        print('Bye')
```

```
In [15]: if True:
        print('Data Science')
        print('Bye Now')
```

Data Science

Bye Now

```
In [18]: if False:
        print('Data Science')
        print('Hey Bye for now')
```

Hey Bye for now

```
In [19]: if True:
        print('Data Science')
    else:
        print('Bye')
```

Data Science

```
In [20]: if False:
        print('Data Science')
    else:
        print('Bye for now')
```

Bye for now

EVEN OR ODD

```
In [22]: x = 4
        r = x%2
        if r==0:
            print('even number')
```

even number

```
In [23]: x = 5
r = x%2
if r==0:
    print('Even number')
```

```
In [24]: x = 6
r = x%2
if r==0:
    print('even number')
if r==1:
    print('odd number')
```

even number

```
In [25]: x = 7
r = x%2
if r==0:
    print('even number')
else:
    print('odd number')
```

odd number

```
In [27]: x = 8
r = x%2
if r==0:
    print('even number')
    print('odd number')
```

even number

odd number

```
In [28]: x = 5
r = x%2
if r==0: print('even number')
else: print('odd number')
```

odd number

```
In [30]: x = 10
r = x % 2
if r == 0:
    print('Even number')
if r == 1:
    print('odd number')
```

Even number

```
In [31]: x = 9
r = x % 2
if r == 0:
    print('Even number')
```

NESTED IF

```
In [34]: x = 6
r = x%2
if r==0:
    print('even number')
if x>8:
    print('Greater number')
else:
    print('odd number')
```

even number
odd number

```
In [35]: x = 7
r = x%2
if r==0:
    print('even number')
if x>4:
    print('Greater number')
else:
    print('odd number')
```

Greater number

```
In [36]: x = 9
if x==1:
    print('One')
if x==2:
    print('Two')
if x==3:
    print('Three')
if x==9:
    print('Nine')
```

Nine

```
In [37]: x = 2
if x==1:
    print('One')
elif x==2:
    print('Two')
elif x==3:
    print('Three')
```

Two

```
In [39]: x =10
if x==1:
    print('One')
elif x==2:
    print('two')
elif x==3:
    print('Three')
else:
    print('Not a number')
```

Not a number