

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

Hello

```
In [4]: if True:
        print('Hello') # it should contain atleast one space
```

```
Cell In[4], line 2
    print('Hello') # it should contain atleast one space
    ^
IndentationError: expected an indented block after 'if' statement on line 1
```

```
In [5]: if False:
        print('Bye')
```

```
In [6]: if False:
        print('Hello')

        print('Bye')
```

Bye

```
In [7]: if True:
        print('Hello')

        print('Bye')
```

Hello

Bye

```
In [8]: if True:
        print('Hello')
        else:
            print('bye')
```

Hello

```
In [9]: if False:
        print('hello')
        else:
            print('Bye')
```

Bye

```
In [11]: if False: print('hello')
         else: print('Bye')
```

Bye

Number is even or odd

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

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

Even Number

```
In [18]: x=4  
         r=x%2  
         if r==0:  
             print('even number')  
         print('odd number')
```

even number

odd number

```
In [19]: x=5  
         r=x%2  
         if r==0:  
             print('even number')  
         print('odd number')
```

odd number

```
In [21]: x=7  
         r=x%2  
         if r==0:  
             print('odd number')
```

```
In [23]: x=7  
         r=x%2  
         if r!=0:  
             print('odd number')
```

odd number

```
In [24]: 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')  
         if r!=0:  
             print('odd')
```

Even

```
In [30]: x=8  
         r=x%2  
         if r==0:  
             print('Even')  
         print('odd')
```

Even
odd

```
In [34]: x=9
r=x%2
if r==0:
    print('Even')
if r!=0:
    print('odd')
```

odd

nested if

```
In [45]: x=7
r=x%2
if r==0:
    print('Even')
if x<2:
    print('Greater')
else:
    print('Odd')
```

Odd

```
In [59]: x=5
r=x%2
if r!=0:
    print('odd')

    if x>2:
        print('greater')
    else:
        print('smaller')

else:
    print('even')
```

odd
greater

```
In [60]: x=1
if x==1:
    print('one')
if x==2:
    print('two')

if x==3:
    print('three')
```

one

```
In [62]: x=4
if x==1:
    print('one')
```

```
if x==2:  
    print('two')  
  
if x==3:  
    print('three')
```

```
In [63]: x=4  
if x==1:  
    print('one')  
  
if x==2:  
    print('two')  
  
if x==3:  
    print('three')  
  
else:  
    print('Number not found')
```

Number not found

```
In [64]: x=4  
if x==1:  
    print('one')  
  
elif x==2:  
    print('two')  
  
elif x==3:  
    print('three')  
  
else:  
    print('Number not found')
```

Number not found

Input function

```
In [74]: values=input('Enter a value').split()  
print (values)
```

['2', '3', '4']

```
In [79]: num=int(input('Enter a value'))  
if num>0:  
    print('Positive')  
elif num<0:  
    print('Negative')  
else:  
    print('Zero')
```

Positive

```
In [81]: a=[int(input(''))]  
print(a)
```

[5]

```
In [86]: b=input('name').upper()  
print(b)
```

RAMYA

```
In [110... text=input('Enter a string')  
vowels='aeiouAEIOU'  
count=0  
for char in text:  
    if char in vowels:  
        count+=1  
print('Number of vowels are:',count)
```

Number of vowels are: 3

```
In [111... text=input('')  
vowels='AEIOUaeiou'  
count=sum(1 for char in text if char in vowels)  
print('Vowels are:',count)
```

Vowels are: 2

```
In [119... a=int(input('Enter a number'))  
if a%2==0:  
    print('Even')  
else:  
    print('odd')
```

odd

```
In [122... a=(input(''))  
if a==a[::-1]:  
    print('Palindrome')  
else:  
    print('Not palindrome')
```

Palindrome

```
In [124... num=int(input(''))  
print('the square is:',num**2)
```

the square is: 9

```
In [127... num=int(input(''))  
if num%3==0:  
    print('Divisible by 3')  
else:  
    print('Not divisible by 3')
```

Divisible by 3

```
In [132... num=int(input(''))  
if num%3==0:  
    print('Divisible by 3')  
else:  
    print('Not divisible by 3')  
if num%7==0:
```

```

    print('Divisible by 7')
else:
    print('Not divisible by 7')

```

Divisible by 3

Divisible by 7

```

In [133... num=int(input(''))
if num%3==0 and num%7==0:
    print('Divisible by both 3 and 7')
else:
    print('Not divisible by both 3 and 7')

```

Divisible by both 3 and 7

```

In [137... val=[(input('')).split(',')]]
print(val)

```

[['4 5 6']]

```

In [139... num1=int(input('Enter 1st no'))
num2=int(input('Enter 2nd no'))
print(num1*num2)

```

9

```

In [141... val=input('').lower()=='true'
print(val)

```

True

```

In [150... strng=input('Enter a string')
print('Reverse of the string',strng[::-1])

```

Reverse of the string iah

```

In [156... strng=input('Enter a string')
a=strng[::-1]
print('Reverse of the string',a)

```

Reverse of the string iah

```

In [158... user=input('')
user1=int(input(''))
print(f'My name is {user} and my age {user1}')

```

My name is Ramya and my age 25

```

In [22]: n=int(input('Enter a number:'))

for i in range(2,n):
    if n % i==0:
        print('Not Prime number')
        break
    else: print('Prime number')

```

Not Prime number

```
In [23]: num=int(input('Enter a number:'))

factorial=1
for i in range(1,num+1):
    factorial*=i
    print('Factorial:',factorial)
```

Factorial: 1
 Factorial: 2
 Factorial: 6
 Factorial: 24
 Factorial: 120

```
In [27]: text=input('Enter a string')
char=input('Enter a string')
print(f'occurance of {char}:{text.count(char)}')
```

occurance of l:3

```
In [28]: text=input("").lower()
print(text)
```

ramya

```
In [32]: n=int(input('enter a numbr'))

for i in range(n,31):
    if n % 10 ==0:
        print(f'{i}is divisible by 10')
        break
    else: print('Not Divisible')
```

Not Divisible

```
In [39]: n=int(input('enter a numbr'))

if n % 10 ==0:
    print('divisible')
else:print('Not Divisible')
```

divisible

```
In [40]: strng=input('').isalpha()
print('Contains alphabets:',strng)
```

Contains alphabets: False

```
In [41]: strng=input('')

if strng.isalpha():
    print('Only alphabets')
else: print('Non alphabets')
```

Only alphabets

```
In [43]: strng=input('')
print('No of words:',len(strng.split()))
```

No of words: 6

```
In [47]: from datetime import datetime
date_strng=input('Enter a date(yyyy-mm-dd: ')
date=datetime.strptime(date_strng, '%Y-%m-%d')
print('Date:',date)
```

Date: 2025-07-18 00:00:00

```
In [48]: a=int(input('enter first value'))
b=int(input('enter second value'))
a,b=b,a
print(f'swaped values are a={a},b={b}')
```

swaped values are a=3,b=2

```
In [50]: user_input=input('')
print(user_input.replace(" ", ""))
```

hellothisisinputfunction

```
In [51]: a=int(input(''))
print('Number:',a**3)
```

Number: 27

```
In [52]: user=input('').split()
print('Names',user)
```

Names ['apple', 'ant', 'aeroplane']

```
In [62]: a=list(map(int,input('').split()))
print('Maximum',max(a))
```

Maximum 4

In []:

In []:

In []:

In []:

In []:

while loop

```
In [1]: i=1
while i<=5:
    print('Hello')
    i+=1
```



```
Hello  
Hello  
Hello  
Hello  
Hello
```

```
In [2]: i=9  
        while i>=1:  
            print('Hi')  
            i-=1
```

```
Hi  
Hi  
Hi  
Hi  
Hi  
Hi  
Hi  
Hi  
Hi  
Hi
```

```
In [3]: i=9  
        while i>=1:  
            print('Hi',i)  
            i-=1
```

```
Hi 9  
Hi 8  
Hi 7  
Hi 6  
Hi 5  
Hi 4  
Hi 3  
Hi 2  
Hi 1
```

```
In [1]: i=5  
        while i>=1:  
            print('FSDS',i)  
            j=1  
            while j<=4:  
                print('AI',j)  
                j+=1  
            i-=1
```

```

FSDS 5
AI 1
AI 2
AI 3
AI 4
FSDS 4
AI 1
AI 2
AI 3
AI 4
FSDS 3
AI 1
AI 2
AI 3
AI 4
FSDS 2
AI 1
AI 2
AI 3
AI 4
FSDS 1
AI 1
AI 2
AI 3
AI 4

```

```

In [8]: i=5
        while i>=1:
            print('FSDS',end=" ")
            j=1
            while j<=4:
                print('AI',end=" ")
                j=j+1
            i=i-1

```

```

FSDS AI AI AI AI FSDS AI AI AI AI FSDS AI AI AI AI FSDS AI AI AI AI

```

```

In [38]: i=1
        while i<=4:
            print('FSDS',end=" ")
            j=1
            while j<=4:
                print('AI',end=" ")
                j+=1

            i+=1
            print()

```

```

FSDS AI AI AI AI
FSDS AI AI AI AI
FSDS AI AI AI AI
FSDS AI AI AI AI

```

```

In [1]: i=3
        while i>=1:
            j=2

```

```

while j>=1:
    print(i*j,end=" ")
    j-=1
print()
i-=1

```

```

6 3
4 2
2 1

```

```

In [2]: i=1
        while i<=7:
            j=2
            while j<=5:
                print(i*j,end=" ")
                j+=1
            print()
            i+=1

```

```

2 3 4 5
4 6 8 10
6 9 12 15
8 12 16 20
10 15 20 25
12 18 24 30
14 21 28 35

```

```

In [3]: i=1
        while i<=7:
            j=2
            while j<=5:
                print(j*i,end=" ")
                j+=1
            print()
            i+=1

```

```

2 3 4 5
4 6 8 10
6 9 12 15
8 12 16 20
10 15 20 25
12 18 24 30
14 21 28 35

```

```

In [4]: i=0
        while i<=3:
            j=1
            while j<=2:
                print(i+j,end=" ")
                j+=1
            print()
            i+=1

```

```

1 2
2 3
3 4
4 5

```

for loop

```
In [5]: name='ramya'
        for i in name:
            print(i)
```

r
a
m
y
a

```
In [6]: name='ramya'
        for i in name:
            print(name)
```

ramya
ramya
ramya
ramya
ramya

```
In [7]: for i in [1,2.2,'hello']:
        print(i)
```

1
2.2
hello

```
In [8]: a=[1,2.2,'hello']
        for i in a:
            print(a)
```

[1, 2.2, 'hello']
[1, 2.2, 'hello']
[1, 2.2, 'hello']

```
In [9]: for i in range(9):
        print(i)
```

0
1
2
3
4
5
6
7
8

```
In [11]: for i in range(0,100,20):
        print(i)
```

```
0
20
40
60
80
```

number which is divisible by 2 using for loop

```
In [13]: for i in range(0,21):
         if i%2==0:
             print(i)
```

```
0
2
4
6
8
10
12
14
16
18
20
```

number which is not divisible by 2 using for loop

```
In [15]: for i in range(0,21):
         if i%2!=0:
             print(i)
```

```
1
3
5
7
9
11
13
15
17
19
```

```
In [3]: x=int(input('Enter no of tickets'))
         i=1
         while i<=x:
             print('Available')
             i+=1
```

```
Available
Available
Available
Available
Available
```

```
In [2]: available=3
         x=int(input('Enter no of tickets'))
         i=1
         while i<=x:
             if i>available:
                 print('Not Available')
```

```

        break
    print('Available')

    i+=1
    print('bye')

```

Available
Available
Available
Not Available
bye

```

In [3]: available=3
        x=int(input('Enter no of tickets'))
        i=1
        while i<=x:
            if i>available:
                print('Not Available')
                i+=1
                continue
            print('Available')

            i+=1
        print('bye')

```

Available
Available
Available
Not Available
Not Available
bye

```

In [13]: for i in range(0,20):
        if i==10:
            break
        print(i)

```

0
1
2
3
4
5
6
7
8
9

```

In [9]: for i in range(0,20):
        if i == 10:
            continue
        print(i)

```

0
1
2
3
4
5
6
7
8
9
11
12
13
14
15
16
17
18
19

```
In [10]: for i in range(0,20):  
         if i == 10:  
             continue  
         print('hi',i)
```

hi 0
hi 1
hi 2
hi 3
hi 4
hi 5
hi 6
hi 7
hi 8
hi 9
hi 11
hi 12
hi 13
hi 14
hi 15
hi 16
hi 17
hi 18
hi 19

for else

```
In [2]: nums=10,20,21,34,35  
        for num in nums:  
            if num%5==0:  
                print(num)
```

10
20
35

```
In [3]: nums=[10,20,21,34,35]
        for num in nums:
            if num%5==0:
                print(num)
```

10
20
35

```
In [4]: nums=[10,20,21,34,35]
        for num in nums:
            if num%5==0:
                print(num)
                break
```

10

```
In [7]: nums=[11,23,21,34,35]
        for num in nums:
            if num%5==0:
                print(num)
                break
```

35

```
In [9]: nums=[11,22,21,34,3]
        for num in nums:
            if num%5==0:
                print(num)
```

```
In [10]: nums=[11,22,21,34,3]
         for num in nums:
             if num%5==0:
                 print(num)
             else:
                 print('Not found')
```

Not found
Not found
Not found
Not found
Not found

```
In [11]: nums=[11,22]
         for num in nums:
             if num%5==0:
                 print(num)
             else:
                 print('Not found')
```

Not found
Not found


```
In [12]: nums=[10,22,25,34,3]
        for num in nums:
            if num%5==0:
                print(num)
            else:
                print('Not found')
```

10
Not found
25
Not found
Not found

```
In [13]: nums=[10,22,25,34,3]
        for num in nums:
            if num%5==0:
                print(num)
        else:
            print('Not found')
```

10
25
Not found

```
In [14]: nums=[1,22,26,37,3]
        for num in nums:
            if num%5==0:
                print(num)
        else:
            print('Not found')
```

Not found

prime number

```
In [15]: num=5
        for i in range(2,num):
            if num % i==0:
                print('Not prime number')
        else:
            print('Prime number')
```

Prime number

```
In [16]: num=2
        for i in range(2,num):
            if num % i==0:
                print('Not prime number')
        else:
            print('Prime number')
```

Prime number

```
In [17]: num=4
         for i in range(2,num):
             if num % i==0:
                 print('Not prime number')
             else:
                 print('Prime number')
```

Not prime number

Prime number

```
In [18]: num=4
         for i in range(2,num):
             if num % i==0:
                 print('Not prime number')
                 break
             else:
                 print('Prime number')
```

Not prime number

In []: