

while Loop

```
In [1]: print("Dog is very clever")#printing 5times is good,but 1000 times hectic,wenuse Lo
print("Dog is very clever")
print("Dog is very clever")
print("Dog is very clever")
print("Dog is very clever")
print("Dog is very clever")
```

Dog is very clever
Dog is very clever
Dog is very clever
Dog is very clever
Dog is very clever
Dog is very clever

```
In [2]: i=1 #initializing
while i<=5:#condition
    print('Dog is clever')
    i=i+1 #increment
```

Dog is clever
Dog is clever
Dog is clever
Dog is clever
Dog is clever

```
In [3]: i = 5
while i>=1:
    print("Dog is clever")
    i=i-1
```

Dog is clever
Dog is clever
Dog is clever
Dog is clever
Dog is clever

```
In [4]: i = 1
while i<=8:
    print('my dog is clever:',i) #print step by step output
    i=i+1
```

my dog is clever: 1
my dog is clever: 2
my dog is clever: 3
my dog is clever: 4
my dog is clever: 5
my dog is clever: 6
my dog is clever: 7
my dog is clever: 8

```
In [5]: i = 5
while i>=1:
```

```
print('my dog is clever:',i)
i=i-1
```

```
my dog is clever: 5
my dog is clever: 4
my dog is clever: 3
my dog is clever: 2
my dog is clever: 1
```

```
In [6]: i = 1
        while i<=5:
            print('he is my aunt son') # when we mention end then new line will not create
            j = 1
            while j<=4:
                print('and also he is my husband')
                j = j + 1
            i = i + 1
            print()# the output which we got is very lengthy but how to make them one line L
```

```
he is my aunt son
and also he is my husband
and also he is my husband
and also he is my husband
and also he is my husband
```

```
he is my aunt son
and also he is my husband
and also he is my husband
and also he is my husband
and also he is my husband
```

```
he is my aunt son
and also he is my husband
and also he is my husband
and also he is my husband
and also he is my husband
```

```
he is my aunt son
and also he is my husband
and also he is my husband
and also he is my husband
and also he is my husband
```

```
he is my aunt son
and also he is my husband
and also he is my husband
and also he is my husband
and also he is my husband
```

```
In [7]: i = 1
        while i<=5:
            print('she know me very well ', end =" ")
            j = 1
            while j<=4:
                print('that im very angry ', end=" ")
```

```

        j = j + 1

    i = i + 1
    print()

```

```

she know me very well   that im very angry   that im very angry   that im very angry   t
hat im very angry
she know me very well   that im very angry   that im very angry   that im very angry   t
hat im very angry
she know me very well   that im very angry   that im very angry   that im very angry   t
hat im very angry
she know me very well   that im very angry   that im very angry   that im very angry   t
hat im very angry
she know me very well   that im very angry   that im very angry   that im very angry   t
hat im very angry

```

```

In [8]: i=1
        while i<=2:
            j=0
            while j<=2:
                print(i*j, end=" ")
                j+=1
            print()
            i+=1

```

```

0 1 2
0 2 4

```

```

In [9]: i=1
        while i<=4:
            j=0
            while j<=3:
                print(i*j,end=" ")
                j+=1
            print()
            i+=1

```

```

0
2
6
12

```

for Loop

```

In [10]: name = 'Ramya'
         for i in name:
             print(i)

```

```

R
a
m
y
a

```

```
In [11]: name = 'Ramya'
         for i in name:
             print(i,end=" ")
```

R a m y a

```
In [12]: name = [1.3,4,5,'Busy']
         for i in name:
             print(i)
```

1.3
4
5
Busy

```
In [13]: for i in [3,5,5.7,'Busy']:
         print(i)
```

3
5
5.7
Busy

```
In [14]: range(5)
```

Out[14]: range(0, 5)

```
In [15]: for i in range(6):
         print(i)
```

0
1
2
3
4
5

```
In [16]: for i in range(2,6):
         print(i)
```

2
3
4
5

```
In [17]: for i in range(2,10,4):
         print(i)
```

2
6

```
In [18]: for i in range(2,30):
         print(i)
```

2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29

```
In [19]: for i in range(1,15):  
         print(i)
```

1
2
3
4
5
6
7
8
9
10
11
12
13
14

```
In [20]: for i in range(1,51):  
         if i%5==0:  
             print(i)
```

5
10
15
20
25
30
35
40
45
50

```
In [21]: for i in range(1,51):  
         if i%5!=0:  
             print(i)
```

1
2
3
4
6
7
8
9
11
12
13
14
16
17
18
19
21
22
23
24
26
27
28
29
31
32
33
34
36
37
38
39
41
42
43
44
46
47
48
49

Break-Continue-Pass

```
In [23]: x = int(input('the apples i have:'))
         i = 1
         while i<=x:
             print('i wont give')
             i+=1
```

i wont give

```
In [28]: apples = 3    # i have
         x = int(input('the apples i have:'))
         i=1
         while i<=1:
             print('i wont give')
             i+=1
```

i wont give

```
In [30]: apples = 3
         x = int(input('the apples i have:'))
         i=1
         while i<=x:
             if i>apples:
                 break # break the statemnt
             print('i wont give')
             i+=1
             print('im hungry')
```

i wont give
im hungry
i wont give
im hungry
i wont give
im hungry

```
In [31]: pples = 3
         x = int(input('the apples i have:'))
         i=1
         while i<=x:
             if i>apples:
                 print('im a bad person')
                 break # break the statemnt
             print('i wont give')
             i+=1
             print('im hungry')
```

i wont give
im hungry
i wont give
im hungry
i wont give
im hungry
im a bad person

```
In [32]: for i in range(1,11):  
        print(i)
```

```
1  
2  
3  
4  
5  
6  
7  
8  
9  
10
```

```
In [34]: for i in range(1,11):# i want only 5  
        if i == 6:  
            break #by using this  
        print(i)
```

```
1  
2  
3  
4  
5
```

```
In [38]: for i in range(1,7):  
        if i == 3:  
            continue #it will continue excepting the given number  
        print(i)
```

```
1  
2  
4  
5  
6
```

```
In [46]: for i in range(1,11):  
        if i == 6:  
            continue  
        print('how are u:',i)
```

```
how are u: 1  
how are u: 2  
how are u: 3  
how are u: 4  
how are u: 5  
how are u: 7  
how are u: 8  
how are u: 9  
how are u: 10
```

```
In [47]: for i in range(1,11):
```


Cell In[47], line 2

^

SyntaxError: incomplete input

```
In [48]: for i in range(1,11):  
         pass
```

```
In [52]: for i in range(1,41):  
         if i%4 == 0:  
             print(i)  
         print('end')
```

```
4  
8  
12  
16  
20  
24  
28  
32  
36  
40  
end
```

```
In [68]: for i in range(1, 41):  
         if i % 4 == 0 or i % 6 == 0:  
             continue  
         print(i)  
         print('end')
```

1
2
3
5
7
9
10
11
13
14
15
17
19
21
22
23
25
26
27
29
31
33
34
35
37
38
39
end

```
In [69]: for i in range(1,51):  
        if (i%2 == 0):  
            #print('even')  
            continue  
        else:  
            print(i)  
print('bye')
```

```

1
3
5
7
9
11
13
15
17
19
21
23
25
27
29
31
33
35
37
39
41
43
45
47
49
bye

```

printing pattern in python

```

In [77]: print('* * * *')
         print('* * * *')
         print('* * * *')
         print('* * * *')

```

```

* * * *
* * * *
* * * *
* * * *

```

```

In [81]: for i in range(1,5): # or
         i=i+1
         print('* * * *')

```

```

* * * *

```

```

In [84]: for i in range(1,5):
         if i<=5:
             print('* * * *')

```

```

* * * *
* * * *
* * * *
* * * *

```

```
In [85]: for j in range(4): # or
         print('*')
```

```
*
*
*
*
```

```
In [86]: for j in range(4):
         print('*', end = " ")
```

```
* * * *
```

```
In [87]: for j in range(4):
         print('#', end=" ")

         for j in range(4):
             print('#', end=" ")
```

```
# # # # # # # #
```

```
In [88]: for j in range(4):
         print('#', end=" ")
         print()
         for j in range(4):
             print('#', end=" ")
```

```
# # # #
# # # #
```

```
In [89]: for j in range(4):
         print('#', end=" ")
         print()
         for j in range(4):
             print('#', end=" ")
             print()
         for j in range(4):
             print('#', end=" ")
             print()
         for j in range(4):
             print('#', end=" ")
             print()
```

```
# # # #
# # # #
# # # #
# # # #
```

```
In [90]: for h in range(4):
         for j in range(4):
             print('*', end=" ")
         print()
```

```
* * * *
* * * *
* * * *
* * * *
```

```
In [93]: for i in range(4):
          for j in range(i+1):
              print('*', end=" ")
          print()
```

```
*
* *
* * *
* * * *
```

```
In [95]: for i in range(1,5):
          for j in range(4):
              if i>j:
                  print("#",end=" ")
          print()
```

```
#
# #
# # #
# # # #
```

```
In [96]: list(range(6))
```

```
Out[96]: [0, 1, 2, 3, 4, 5]
```

```
In [97]: for i in range(6):
          for j in range(i):
              print("*",end=" ")
          print()
```

```
*
* *
* * *
* * * *
* * * * *
```

```
In [98]: for i in range(4):
          for j in range(i+1):
              print('#', end=" ")
          print()
```

```
#
# #
# # #
# # # #
```

```
In [100... for i in range(4):
            for j in range(4-i): #reverse printing
                print('#', end=" ")
            print()
```

```
# # # #
# # #
# #
#
```

```
In [103...  for i in range(1,4):  
              print('&'*(5-i) )
```

&&&&

&&&

&&

```
In [ ]:
```