

PRINTING PATTERN IN PYTHON

```
mario-less/ $ ./mario      mario-less/ $ ./mario
Height: 5                  Height: 5
  #                         #
 ##                        ##
 ###                      ###
####                     ####
#####                   #####
```

```
In [1]: print(' # # # # #')
        print(' # # # # #')
        print(' # # # # #')
        print(' # # # # #')
```

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

```
In [4]: for i in range(1,5):
        print(' # # # # #')
        i = i+1
```

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

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

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

```
In [6]: for j in range(4):
        print(' # # # # #')
```

```
#
#
#
#
```

```
In [7]: for j in range(4):
        print(' # # # # #')
```

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

```
In [11]: for j in range(4):
          print('#', end=" ")
```

```
# # # #
```

```
In [12]: for j in range(4):
          print('#', end=" ")

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

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

```
In [14]: for j in range(4):
          print('#', end=" ")

          print()

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

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

```
In [15]: 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=" ")
```

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

```
In [16]: for i in range(4):
          for j in range(4):
              print('#', end=" ")
          print()
```

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

```
In [17]: for i in range(4):
          for j in range(i+1): # how many # to print in each row.
              print('#', end=" ")
          print()
```

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

```
In [18]: for i in range(1,5):
          print('#'*i)  # repeat the # symbol i times.

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

```
In [24]: for i in range(1,5):
          for j in range(4):
              if i>j:
                  print('#', end=" ")
          print()

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

```
In [25]: for i in range(4):
          for j in range(i):
              print('#', end=" ")
          print()

#
# #
# # #
```

```
In [26]: for i in range(4):
          for j in range(i+1):
              print('#', end=" ")
          print()

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

```
In [28]: for i in range(4):
          for j in range(4-i):
              print('#', end=" ")
          print()

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

```
In [29]: for i in range(1,5):
          print('#'*(5-i))

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

for else

- For|Else in python - In other language for else not supportable but in python it is supportable

```
In [30]: nums = [12,15,18,21,26, 30, 40]

for num in nums:
    if num%5==0:
        print(num)
```

15
30
40

```
In [31]: nums = [12,14,18,21,25,30,35]

for num in nums:
    if num%5==0:
        print(num)
```

25
30
35

```
In [32]: nums = [10,14,18,21,5,10]

for num in nums:
    if num%5==0:
        print(num)
        break    #it will print only 1 number then it break
```

10

```
In [33]: nums = [7,14,18,21,23,27] #hear there is no number which is divisible by 5 we go

for num in nums:
    if num%5==0:
        print(num)
        break
```

```
In [34]: nums = [7,14,18,21,23,27,29] #hear there is no number which is divisible by 5 we

for num in nums:
    if num%5==0:
        print(num)
        break
    else:
        print('Number not Found')
```

Number not Found
Number not Found
Number not Found
Number not Found
Number not Found
Number not Found
Number not Found

```
In [35]: nums = [7,14]

for num in nums:
    if num % 5 == 0:
        print(num)
        break
    else:
        print('Number Not Found') #every iteration it cheking condition
```

Number Not Found
Number Not Found

```
In [44]: nums = [7,14,18,21,23,27]

for num in nums:
    if num%5==0:
        print(num)
        break
    else:
        print('Number Not Found')
```

Number Not Found

```
In [42]: nums = [7,14,18,21,20,27]

for num in nums:
    if num % 5 == 0:
        print(num)
        break
    else:
        print('Not Found')
```

20

```
In [45]: nums = [10,14,18,21,20,27,30]

for num in nums:
    if num % 5 == 0:
        print(num)
        #break
    else:
        print('Not Found')
```

10
20
30
Not Found

```
In [46]: nums = [10,14,18,21,20,27]

for num in nums:
    if num % 5 == 0:
        print(num)
        break
    else:
        print('Not Found')
```

10

- prime number - how to check given number is prime number or not

```
In [57]: num = 14

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

Not a Prime

```
In [55]: num = 13

for i in range(2,num):
    if num % i == 0:
        print('Not prime Number')
        break
    else:
        print('Prime Number')
```

Prime Number

```
In [ ]:
```