## Range

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In [1]: r=range(2)
 Out[1]: range(0, 2)
 In [2]: r1=range(12)
 Out[2]: range(0, 12)
 In [3]: range(10,30)
Out[3]: range(10, 30)
 In [5]: r2=list(range(12))
         r2
Out[5]: [0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11]
 In [6]: r_=list(range(4))
         r_
Out[6]: [0, 1, 2, 3]
 In [7]: list(range(2,10))
Out[7]: [2, 3, 4, 5, 6, 7, 8, 9]
In [8]: list(range(10,100,20))
Out[8]: [10, 30, 50, 70, 90]
In [12]: list(range(40,200,10))
Out[12]: [40, 50, 60, 70, 80, 90, 100, 110, 120, 130, 140, 150, 160, 170, 180, 190]
In [13]: list(range(10,30,5,3))
        TypeError
                                                 Traceback (most recent call last)
        Cell In[13], line 1
        ----> 1 list(range(10,30,5,3))
       TypeError: range expected at most 3 arguments, got 4
In [14]: r=range(10)
Out[14]: range(0, 10)
In [15]: type(r)
```

```
Out[15]: range
In [16]: list(r)
Out[16]: [0, 1, 2, 3, 4, 5, 6, 7, 8, 9]
In [17]: for i in r:
             print('yes')
             print(i)
        yes
        0
        yes
        1
        yes
        2
        yes
        3
        yes
        4
        yes
        5
        yes
        6
        yes
        7
        yes
        8
        yes
In [18]: r
Out[18]: range(0, 10)
In [19]: range(10.0,22.5)
        TypeError
                                                  Traceback (most recent call last)
        Cell In[19], line 1
        ----> 1 range(10.0,22.5)
       TypeError: 'float' object cannot be interpreted as an integer
In [20]: w=range(10,30)
Out[20]: range(10, 30)
In [22]: for i in w:
             print(i)
```

```
11
        12
        13
        14
        15
        16
        17
        18
        19
        20
        21
        22
        23
        24
        25
        26
        27
        28
        29
In [23]: r
Out[23]: range(0, 10)
In [24]: r[4]
Out[24]: 4
In [25]: r[0]
Out[25]: 0
In [26]: r[6]
Out[26]: 6
In [27]: r[0:3]
Out[27]: range(0, 3)
In [28]:
         range(100)
Out[28]: range(0, 100)
In [29]:
         range(10,30)
Out[29]: range(10, 30)
In [30]: range(3)
Out[30]: range(0, 3)
In [31]: range(10,30)
Out[31]: range(10, 30)
```

10

```
In [33]: range(10,30,4)
Out[33]: range(10, 30, 4)
In [34]: range(3,23,5,10)
        TypeError
                                                  Traceback (most recent call last)
        Cell In[34], line 1
        ----> 1 range(3,23,5,10)
        TypeError: range expected at most 3 arguments, got 4
In [35]: range(10,30,20.34)
        TypeError
                                                  Traceback (most recent call last)
        Cell In[35], line 1
        ---> 1 range(10,30,20.34)
       TypeError: 'float' object cannot be interpreted as an integer
In [37]: for i in range(20):
             print(i)
        0
        1
        2
        3
        4
        5
        6
        7
        8
        9
        10
        11
        12
        13
        14
        15
        16
        17
        18
        19
In [38]: for i in range(20,30):
             print(i)
        20
        21
        22
        23
        24
        25
        26
        27
        28
        29
```

```
In [39]: for i in range(10,50,8):
             print(i)
        10
        18
        26
        34
       42
In [40]: for i in range(10,30,5,2):
             print(i)
        TypeError
                                                Traceback (most recent call last)
        Cell In[40], line 1
        ----> 1 for i in range(10,30,5,2):
             print(i)
       TypeError: range expected at most 3 arguments, got 4
 In [ ]:
```