



```
In [1]: 15 % 2
```

```
Out[1]: 1
```

```
In [2]: 15 %% 2
```

```
Cell In[2], line 1
    15 %% 2
      ^
SyntaxError: invalid syntax
```

```
In [3]: 3 + 'nit'
```

```
-----
TypeError                                Traceback (most recent call last)
Cell In[3], line 1
----> 1 3 + 'nit'

TypeError: unsupported operand type(s) for +: 'int' and 'str'
```

```
In [4]: print('c:\Users')
```

```
Cell In[4], line 1
    print('c:\Users')
      ^
SyntaxError: (unicode error) 'unicodeescape' codec can't decode bytes in position 2-3: truncated \UXXXXXXXX escape
```

```
In [5]: print('D:\NIT')
```

```
Cell In[5], line 1
    print('D:\NIT')
      ^
SyntaxError: (unicode error) 'unicodeescape' codec can't decode bytes in position 2-3: malformed \N character escape
```

```
In [7]: name = 'fine'
        name
```

```
Out[7]: 'fine'
```

```
In [8]: name[0:1]
```

```
Out[8]: 'f'
```

```
In [9]: name
```

```
Out[9]: 'fine'
```

```
In [10]: name[1:]
```

```
Out[10]: 'ine'
```

```
In [11]: 'd' + name[1:]
```

```
Out[11]: 'dine'
```

```
In [12]: help()
```

Welcome to Python 3.12's help utility! If this is your first time using Python, you should definitely check out the tutorial at <https://docs.python.org/3.12/tutorial/>.

Enter the name of any module, keyword, or topic to get help on writing Python programs and using Python modules. To get a list of available modules, keywords, symbols, or topics, enter "modules", "keywords", "symbols", or "topics".

Each module also comes with a one-line summary of what it does; to list the modules whose name or summary contain a given string such as "spam", enter "modules spam".

To quit this help utility and return to the interpreter, enter "q" or "quit".

You are now leaving help and returning to the Python interpreter. If you want to ask for help on a particular object directly from the interpreter, you can type "help(object)". Executing "help('string')" has the same effect as typing a particular string at the help> prompt.

RANGE

```
In [13]: range(0,10)
```

```
Out[13]: range(0, 10)
```

```
In [14]: list(range(0,10))
```

```
Out[14]: [0, 1, 2, 3, 4, 5, 6, 7, 8, 9]
```

```
r = range(10) r
```

```
In [15]: list(range(10,20))
```

```
Out[15]: [10, 11, 12, 13, 14, 15, 16, 17, 18, 19]
```

```
In [16]: r = list(range(10,20))  
r
```

```
Out[16]: [10, 11, 12, 13, 14, 15, 16, 17, 18, 19]
```

```
In [17]: for i in r:  
         print(i)
```

10
11
12
13
14
15
16
17
18
19

```
In [18]: list(range(10,100,5))
```

```
Out[18]: [10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95]
```

```
In [19]: r = list(range(10,100,5))  
r
```

```
Out[19]: [10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95]
```

```
In [20]: for i in r:  
         print(i)
```

10
15
20
25
30
35
40
45
50
55
60
65
70
75
80
85
90
95

```
In [21]: list(r)
```

```
Out[21]: [10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95]
```

```
In [22]: r1 = range(10,50,7)  
r1
```

```
Out[22]: range(10, 50, 7)
```

```
In [24]: for i in r1:  
         print(i)
```

10
17
24
31
38
45

In [25]: `r`

Out[25]: [10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95]

In [26]: `r[5]`

Out[26]: 35

In [27]: `r[1:]`

Out[27]: [15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95]

In [28]: `range(10,100,50,5)`

```
-----  
TypeError                                Traceback (most recent call last)  
Cell In[28], line 1  
----> 1 range(10,100,50,5)  
  
TypeError: range expected at most 3 arguments, got 4
```

In [32]: `range(all)`

```
-----  
TypeError                                Traceback (most recent call last)  
Cell In[32], line 1  
----> 1 range(all)  
  
TypeError: 'builtin_function_or_method' object cannot be interpreted as an integer
```

In [33]: `range(any)`

```
-----  
TypeError                                Traceback (most recent call last)  
Cell In[33], line 1  
----> 1 range(any)  
  
TypeError: 'builtin_function_or_method' object cannot be interpreted as an integer
```

In [34]: `range(all())`

TypeError

Traceback (most recent call last)

Cell In[34], line 1
----> 1 range(all())

TypeError: all() takes exactly one argument (0 given)

ARITHMETIC OPERATORS

In [35]: `x1,y1 = 10,15`

In [36]: `x1 + y1`

Out[36]: 25

In [37]: `x1 - y1`

Out[37]: -5

In [38]: `x1 * y1`

Out[38]: 150

In [39]: `x1 / y1`

Out[39]: 0.6666666666666666

In [40]: `x1 // y1`

Out[40]: 0

In [41]: `x1 ** y1`

Out[41]: 10000000000000000

In [42]: `x1 % y1`

Out[42]: 10

In []:

In []:

In []:

In []: