In [1]:
```
x = [1, 2, 3, 4]
y = filter(lambda a: a % 2 == 0, x)
print(list(y))
```

```
[2, 4]
```

In [5]:
```
list1 = ['a', 'b', 'g', 1, 5]
print(list1.pop)  #cause pop is a function should be end with()
```

```
<built-in method pop of list object at 0x0000028E33B6D700>
```

In [7]:
```
print(int(3.9))
```

```
3
```

In [9]:
```
a = 'Python' + ".py"
print(a)
```

```
Python.py
```

In [13]:
```
print(str(True), end=" ") # This will print "True" followed by a space.
int("4.5")  # This will raise a ValueError because "4.5" is not a valid integer
```

```
True
---------------------------------------------------------------------------
ValueError                                Traceback (most recent call last)
Cell In[13], line 2
      1 print(str(True), end=" ") # This will print "True" followed by a space.
----> 2 int("4.5")  # This will raise a ValueError because "4.5" is not a valid i
nteger string.

ValueError: invalid literal for int() with base 10: '4.5'
```

In [17]:
```
name = 'Hello, world!'
print(name[1:5])
```

```
ello
```

In [19]:
```
set1 = {1, 5, 6, 4, 3}
print(set1)
```

```
{1, 3, 4, 5, 6}
```

In [21]:
```
print(type(0xFF))
```

```
<class 'int'>
```

In [23]:
```
aTuple = (1, 'Jhon', 1+3j)
print(type(aTuple[2:3]))
```

```
<class 'tuple'>
```

In [25]:
```
print(bool(0), bool(3.14159), bool(-3), bool(1.0+1j))
```

```
False True True True
```

In [32]:
```
x = 10
y = "20"
print(x + int(y))
```

```
30
```

In [34]:
```
x = {"apple", "banana", "cherry"}
print(type(x))
```

```
<class 'set'>
```

In [36]:
```
x = {"name": "John", "age": 30}
print(type(x))
```

```
<class 'dict'>
```

In [38]:
```
x = [1, 2, 3]
print(type(x))
```

```
<class 'list'>
```

In [42]:
```
x = 10
y = "20"
print(str(x) + y)
```

```
1020
```

In [44]:
```
x = [1, 2, 3]
y = x.copy()
x.append(4)
print(y)
```

```
[1, 2, 3]
```

In [46]:
```
x = {"a", "b", "c"}
y = {"b", "c", "d"}
z = x & y
print(z)
```

```
{'c', 'b'}
```

In [48]:
```
x = 10
y = 20
x, y = y, x
print(x, y)
```

```
20 10
```

In [50]:
```
x = {"a": 1, "b": 2}
y = {"b": 3, "c": 4}
z = {**x, **y}
print(z)
```

```
{'a': 1, 'b': 3, 'c': 4}
```

In [52]:
```
x = {1, 2, 3}
x.clear()
print(x)
```

```
set()
```

In [54]:
```
x = "hello"
y = x.upper()
print(y)
```

```
HELLO
```

In [58]:
```
x = "hello"
y = x.replace("l", "L", 1)
```

```
print(y)
```

```
heLlo
```

In [60]:
```
x = (1, 2, [3, 4])
x[2][0] = 5
print(x)
```

```
(1, 2, [5, 4])
```

In [62]:
```
x = {"name": "John", "age": 30}
print(x["address"])
```

```
---------------------------------------------------------------------------
KeyError                                  Traceback (most recent call last)
Cell In[62], line 2
      1 x = {"name": "John", "age": 30}
----> 2 print(x["address"])

KeyError: 'address'
```

In [64]:
```
x = [1, 2, 3]
y = x[:]
x[0] = 4
print(y)
```

```
[1, 2, 3]
```

In [2]:
```
x = {"name":"john","age":30}
y = x.copy()
x["name"] = "jane"
print(y["name"])
```

```
john
```

In [4]:
```
x = {"apple", "banana", "cherry"}
y = x.pop()
print(y)
```

```
cherry
```

In [6]:
```
x = [1, 2, 3]
x.insert(1, 4)
print(x)
```

```
[1, 4, 2, 3]
```

In [8]:
```
x = {"a", "b", "c"}
y = x - {"b"}
print(y)
```

```
{'c', 'a'}
```

In [10]:
```
x = {1,2,3}
y = x.add(4)
print(x)
```

```
{1, 2, 3, 4}
```

In [12]:
```
age = 25
print(age)
```

```
25
```

In [16]:
```
number = 20
print(20 - 1)
```

```
19
```

In [18]:
```
firstname = 'code'
surename = 'chef'
print('code','chef')
```

```
code chef
```

In [20]:
```
a = 23
b = 20
sum = a + b
print(sum)
```

```
43
```

In [24]:
```
length = 45
breath = 76
Area_of_rectangle = length * breath
print(Area_of_rectangle)
```

```
3420
```

In [26]:
```
radius = 8.9
pi = 3.14
Area_of_circle = pi * radius * radius
print(Area_of_circle)
```

```
248.71940000000004
```

In [ ]:
```
a = 'Learning'
b = 'is fun!'
print
```