In [5]:
```
ali = 50
nasir = 70
```

In [6]:
```
marks = [50, 70, 90, 82, 76]
```

In [8]:
```
marks = [
    ["Ali", 50, 21],
    ["Nasir, 70, 22"],
    ["Kamran", 90, 45],
    ["jibran", 82, 30],
]
```

In [10]:
```
marks[2]
```

Out[10]:
```
['Kamran', 90, 45]
```

In [12]:
```
{
     "name" : "Imran",
     "marks" : 85,
     "age" : 21,
     "class" : 8,
}
```

Out[12]:
```
{'name': 'Imran', 'marks': 85, 'age': 21, 'class': 8}
```

In [ ]:
```
marks = input ("enter your marks:")
print(Marks/100)
```

In [ ]:
```
if ( grade >=90 )
   print("A")
elif ( grade >= 80 )
   print("B")
elif ( grade >= 70 )
   print("C")
elif ( grade >= 60 )
   print("D")
```

In [ ]:
```
if ( grade >=90 )
   print("A")
```

In [ ]:
```
if ( cost = per night 1.59)
   print("1.59")
elif ( cost = 1)
   print("1")
```

In [ ]:
```
if (cost >= Sunday 1$)
   print()
```

In [ ]:
```
if DVD returned >8;
cost per night 1.59
scratched
```

In [ ]:
```
rent = 1.59
nod = int(input("how many days dvd kep"))
day = input("What day DVD was rented")
time = input("is video returned after 8:00 pm Y/N ?")
scratch = input("is DVD scratched Y/N ?")
discount = 1
fine = 0
if day == "Sunday"
   discount = (100-30)/100
    if scratch == "Y":
       fine = 2
elif day == "thursday":
    discount = 0.5
else:
    if scratch == "Y":
       fine = 1
rent = rent * nod * discount + fine
print(rent)
```

In [ ]:
```
for i in range (1,5)
    for j in range (0,3)
        print (i * j,end='')
    print('/n')
output:
0 1 2
0 2 4
0 3 6
```

In [5]:
```
for i in range (1,5)
    for j in range (0,3)
        print (i * j,end='')
    print('/n')
```

```
  File "<ipython-input-5-ced7c2260be0>", line 1
    for i in range (1,5)
                       ^
SyntaxError: invalid syntax
```

In [ ]:
```
1.sach = False
2.Counter = 0
3.While(sach!=True):
4.    if counter == 10:
5.    sach = True
6.    counter+=1
7.    print('Yuiiiiiii….')
8.print('Total liter='+str(counter))
```

In [4]:
```
numbers = [0, 1, 2, 3, 4, 5, 6, 7, 8, 9]
index = 0
while (index <10)
     print(numbers[index])

    if numbers(index) = 6
        break
        print(index)
```

```
  File "<tokenize>", line 6
    if numbers(index) = 6
    ^
IndentationError: unindent does not match any outer indentation level
```

In [6]:
```
a = 6
b = 6
id(a)
```

Out[6]:
```
8790841991728
```

In [2]:
```
a is b
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
<ipython-input-2-013577cb2bb9> in <module>
----> 1 a is b

NameError: name 'a' is not defined
```

In [4]:
```
list1 = ['Ali', 'Kamran', 'Rashid']
list2 = list1
print(list1)
print(list2)
```

```
['Ali', 'Kamran', 'Rashid']
['Ali', 'Kamran', 'Rashid']
```

In [6]:
```
list2.append("Zahid")
list2
```

Out[6]:
```
['Ali', 'Kamran', 'Rashid', 'Zahid', 'Zahid']
```

In [8]:
```
list1
```

Out[8]:
```
['Ali', 'Kamran', 'Rashid', 'Zahid', 'Zahid']
```

In [10]:
```
id(list1)
```

Out[10]:
```
86629128
```

In [12]:
```
id(list2)
```

Out[12]:
```
86629128
```

In [14]:
```
list3 = list2.copy()
list3.pop()
list3
```

Out[14]:
```
['Ali', 'Kamran', 'Rashid', 'Zahid']
```

In [16]:
```
list2
```

Out[16]:
```
['Ali', 'Kamran', 'Rashid', 'Zahid', 'Zahid']
```

In [18]:
```
list2 is list1
```

Out[18]:
```
True
```

In [20]:
```
list3 is list2
```

Out[20]:
```
False
```

In [21]:
```
list4 = [24, "Nadeem", "Karim", "Imran", "imran.80@gmail.com", 34]
```

In [24]:
```
myDict1 = {}
```

In [2]:
```
myDict = {
    "id":24,
    "fName": "Karim",
    "lName": "Usman",
    "email": "imran.80@gmail.com",
    "age": 35

}
```

In [4]:
```
myDict.keys()
```

Out[4]:
```
dict_keys(['id', 'fName', 'lName', 'email', 'age'])
```

In [6]:
```
myDict.values()
```

Out[6]:
```
dict_values([24, 'Karim', 'Usman', 'imran.80@gmail.com', 35])
```

In [8]:
```
myDict["id"]
```

Out[8]:
```
24
```

In [11]:
```
myDict("fname")
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
<ipython-input-11-bca7b7aa4d65> in <module>
----> 1 myDict("fname")

TypeError: 'dict' object is not callable
```

In [15]:
```
myDict.get("fname")
```

In [17]:
```
myDict.get("abc", "key not found")
```

Out[17]:
```
'key not found'
```

In [19]:
```
myDict2 = myDict.copy()
myDict2
```

Out[19]:
```
{'id': 24,
 'fName': 'Karim',
 'lName': 'Usman',
 'email': 'imran.80@gmail.com',
 'age': 35}
```

In [22]:
```
myDict2["fName"]="Nasir"
myDict2["lName"]="Rahid"
```

In [24]:
```
myDict2["skills"]=['python', 'java','C++']
myDict2
```

Out[24]:
```
{'id': 24,
 'fName': 'Nasir',
 'lName': 'Rahid',
 'email': 'imran.80@gmail.com',
 'age': 35,
 'skills': ['python', 'java', 'C++']}
```

In [26]:
```
list5 = ['id', 'name', 'fathername', 'mobile', 'email']
myDict7 = dict.fromkeys(list5)
myDict7
```

Out[26]:
```
{'id': None, 'name': None, 'fathername': None, 'mobile': None, 'email': None}
```

In [28]:
```
list6=[25,'Ali', 'Hussain', '0345987642', 'xyz@hotmail.com']
print(list5)
print(list6)
```

```
['id', 'name', 'fathername', 'mobile', 'email']
[25, 'Ali', 'Hussain', '0345987642', 'xyz@hotmail.com']
```

In [30]:
```
list9=zip(list5,list6)
list9
```

Out[30]:
```
<zip at 0x83e2f88>
```

In [32]:
```
myDict11=dict(zip(list5,list6))
myDict11
```

Out[32]:
```
{'id': 25,
 'name': 'Ali',
 'fathername': 'Hussain',
 'mobile': '0345987642',
 'email': 'xyz@hotmail.com'}
```

In [34]:
```
#List of Dictioneries
```

In [*]:
```
lst=[]
chk=''
while chk.lower() != 'x':
    dict1 = {
        'id': input("please enter ID: "),
        'name': input("kindly enter name:"),
        'skills': input("please enter skills: ").split()
    }
    lst.append(dict)
    chk = input("Enter x to exit and any other key to Continue: ")
lst
```

```
please enter ID:
```

In [*]:
```
lst=[]
chk=''
while chk.lower() != 'x':
    dict1 = {
        'id': input("please enter ID: "),
        'name': input("kindly enter name:"),
        'marks': input('english':.....,
                       'Science':.....,
                       'Maths':.......,
                       }
        'hobbies' : input("please enter, seperated hobbies:").split()
    }
    lst.append(dict1)
    chk = input("Enter x to exit and any other key to Continue: ")
lst
```

In [ ]:
```

```