

```
In [2]: print("Hey furqaan,this is in continuation of class one(c1-basics)")
```

Hey furqaan,this is in continuation of class one(c1-basics)

tuple

```
In [ ]:
```

```
In [1]: t=(22,33,4)
```

```
In [2]: t
```

Out[2]: (22, 33, 4)

```
In [3]: type(t)
```

Out[3]: tuple

```
In [4]: a=()
        b=[]
        c={}
```

```
In [5]: type(a)
```

Out[5]: tuple

```
In [6]: type(b)
```

Out[6]: list

```
In [7]: type(c)
```

Out[7]: dict

```
In [8]: t1=(22,33,211,44,22,33)
```

```
In [9]: t1
```

Out[9]: (22, 33, 211, 44, 22, 33)

```
In [10]: ##ONLY 2 FTNS ARE AVAILABLE FOR TUPLE
```

```
In [11]: t1.count(2)
```

Out[11]: 0

```
In [12]: t1.count(22)
```

Out[12]: 2

```
In [13]: t1.index(22)
```

Out[13]: 0

```
In [14]: t1.index(33)
```

Out[14]: 1

```
In [15]: append,insert,.extend does not work here
```

```
File "C:\Users\furqa\AppData\Local\Temp\ipykernel_8600\2503192278.py", line 1
    append,insert,.extend does not work here
                        ^
SyntaxError: invalid syntax
```

```
In [ ]: t1.sort()
```

```
In [ ]: l=[33,44,5,3]
```

```
In [ ]: l.sort()
```

```
In [ ]: l
```

```
In [ ]: t1
```

```
In [ ]: t1.insert(2,3)
```

```
In [ ]: for i in t1:
        print(i)
```

```
In [ ]: for i in range(len(t1)):
        print(t1[i])
```

```
In [ ]: 33 in t1
```

```
In [ ]: 'k' in t1
```

set

```
In [ ]: S={}
```

```
In [ ]: type(S)
```

```
In [ ]: a={1,2}
```

```
In [ ]: type(a)
```

```
In [ ]: a
```

```
In [ ]: a={22,'sss',77,22,33,'sss','er'}
```

```
In [ ]: a
```

```
In [ ]: len(a)
```

```
In [ ]: s={33,455,6787,1,2,3,3}
```

```
In [ ]: s
```

```
In [ ]: s
```

```
In [ ]: s
```

```
In [ ]: a=list(s)
```

```
In [ ]: a
```

```
In [ ]: s
```

```
In [ ]: type(a)
```

```
In [ ]: x=set(a)
```

```
In [ ]: a
```

```
In [ ]: x
```

```
In [ ]: tuple(x)
```

```
In [ ]: x
```

```
In [ ]: w=tuple(x)
```

```
In [ ]: w
```

```
In [ ]: x
```

```
In [ ]: list_convert=[555,6677,88]
```

```
In [ ]: s,w,a
```

```
In [ ]: s.pop()
```

```
In [ ]: s
```

```
In [ ]: s.pop()
```

```
In [ ]: s
```

```
In [ ]: w.pop()
```

```
In [ ]: a
```

```
In [ ]: a.pop()
```

```
In [ ]: a
```

```
In [ ]: a.pop()
```

```
In [ ]: a
```

```
In [ ]: a.pop(0)
```

```
In [ ]: a.remove(2)
```

```
In [ ]: a
```

```
In [ ]: x={'1' : 'furqaan', 'a':33}
```

```
In [ ]: x
```

```
In [ ]: x['1']
```

```
In [ ]: x['a']
```

```
In [ ]: x[a]
```

```
In [ ]: x['a']=22
```

```
In [ ]: x
```

```
In [ ]: ds={ }
```

```
In [ ]: type(ds)
```

```
In [ ]: s=set()
```

```
In [ ]: type(s)
```

```
In [ ]: d={1:'dd',2:'djhd'}
```

```
In [ ]: d[1]
```

```
In [ ]: d={'a':1,'b':2,'c':3}
```

```
In [ ]: d
```

```
In [ ]: d.get('d')
```

```
In [ ]: d.get('a')
```

```
In [ ]: 1 in d
```

```
In [ ]: 'a' in d
```

```
In [ ]: 5 in d
```

```
In [ ]: for i in d.values():  
        print(i)
```

```
In [ ]: for i in d.keys():  
        print(i)
```

```
In [ ]: for i in d.keys():  
        print(i,' ',d[i])
```

```
In [ ]: d['d']=4
```

```
In [ ]: d
```

```
In [ ]: del(d['b'])
```

```
In [ ]: d
```

```
In [ ]: d={}

for i in range(5):
    x=input("enter 5 product names ")

    while i==j:
        y=int(input('enter the price'))
        break
```

```
In [7]: products=[]
prices=[]
for i in range(5):
    x=input("enter 5 product names ")
    products.append(x)
for j in range(5):
    y=int(input("enter prices"))
    prices.append(y)
```

```
enter 5 product names  aapple
enter 5 product names  banana
enter 5 product names  carrot
enter 5 product names  pineapple
enter 5 product names  bread'
enter prices333
enter prices45
enter prices65
enter prices24
enter prices24
```

```
In [8]: products
```

```
Out[8]: ['aapple', 'banana', 'carrot', 'pineapple', "bread"]
```

```
In [3]: prices
```

```
Out[3]: [22, 33, 55, 212, 353]
```

```
In [2]: for i in range(5):
        pd[products[i]]=prices[i]
```

```
In [15]: type(pd)
```

```
Out[15]: dict
```

```
In [25]: for i in range(5):
        pd[products[i]]=prices[i]
```

```
In [26]: pd.keys()
```

```
Out[26]: dict_keys([])
```

```
In [24]: pd
```

```
Out[24]: {0: 'aapple',
1: 'banana',
2: 'carrot',
3: 'pineapple',
4: "bread'",
'aapple': 333,
'banana': 45,
'carrot': 65,
'pineapple': 24,
"bread'": 24}
```

```
In [1]: products=[]
prices=[]
product_dict={}
for i in range(5):
    x=input("enter "+ str(i+1) + " product names ")
    products.append(x)
for j in range(5):
    y=int(input("enter prices"))
    prices.append(y)
for i in range(5):
    product_dict[products[i]]=prices[i]
```

```
enter 1 product names  apple
enter 2 product names  b
enter 3 product names  c
enter 4 product names  d
enter 5 product names  e
enter prices33
enter prices44
enter prices11
enter prices55
enter prices66
```

```
In [2]: product_dict
```

```
Out[2]: {'apple': 33, 'b': 44, 'c': 11, 'd': 55, 'e': 66}
```

```
In [ ]: count=5
product={}
for i in range(count):
    product_name=input("Enter the product name\n ")
    price=eval(input("Enter the product price\n"))
    product[product_name]=price
```

```
Enter the product name
aaple
Enter the product price
33
Enter the product name
samsung
Enter the product price
33333
Enter the product name
mi
```

```
In [2]: product
```

```
Out[2]: {'aaple': 33, 'samsung': 33333, 'mi': 3554, 'oppo': 344334, 'realme': 54546}
```

```
In [3]: product_name=input("Enter the product name\n ")
print('the coresponding price is ',product[product_name])
```

```
Enter the product name
mi
the coresponding price is  3554
```

```
In [3]: month_dict={}
```

```
In [4]: month_dict
```

```
Out[4]: {}
```

```
In [5]: for i in range(12):
        month=input("enter the month ")
        days=int(input("enter the Number of days "))
        month_dict[month]=days
```

```
enter the month jan
enter the Number of days 31
enter the month feb
enter the Number of days 28
enter the month mar
enter the Number of days 31
enter the month apr
enter the Number of days 30
enter the month may
enter the Number of days 31
enter the month jun
enter the Number of days 30
enter the month jul
enter the Number of days 31
enter the month aug
enter the Number of days 31
enter the month sep
enter the Number of days 30
enter the month oct
enter the Number of days 31
enter the month nov
enter the Number of days 30
enter the month dec
enter the Number of days 31
```

```
In [6]: month_dict
```

```
Out[6]: {'jan': 31,
        'feb': 28,
        'mar': 31,
        'apr': 30,
        'may': 31,
        'jun': 30,
        'jul': 31,
        'aug': 31,
        'sep': 30,
        'oct': 31,
        'nov': 30,
        'dec': 31}
```

```
In [8]: month=input("enter the month\n")
        print("the month of ",month," has ",month_dict[month],' days')
```

```
enter the month
mar
the month of  mar  has  31  days
```

```
In [9]: month=input("enter the month\n")
        print("the month of ",month," has ",month_dict[month],' days')
```

```
enter the month
dec
the month of  dec  has  31  days
```

```
In [10]: month=input("enter the month\n")
         print("the month of ",month," has ",month_dict[month],' days')
```

```
enter the month
feb
the month of  feb  has  28  days
```

```
In [27]: month_dict.keys()
```

```
Out[27]: dict_keys(['jan', 'feb', 'mar', 'apr', 'may', 'jun', 'jul', 'aug', 'sep', 'oct', 'nov', 'dec'])
```

```
In [30]: for i in sorted(month_dict.keys()):
         print(i)
```

```
apr
aug
dec
feb
jan
jul
jun
mar
may
nov
oct
sep
```

```
In [31]: for i in sorted(month_dict.keys(),reverse=True):
         print(i)
```

```
sep
oct
nov
may
mar
jun
jul
jan
feb
dec
aug
apr
```

```
In [ ]: team_dict={}
        for i in range(5):
            team=input("enter the name of the team\t")
            wins=int(input("enter the number of wins\t"))
            lossess=int(input("enter the number of lossess\t"))
            team_dict[team]=[wins,lossess]
```

```
In [39]: team_dict
```

```
Out[39]: {'india': [2, 4],
          'pakistan': [3, 5],
          'sri lanka': [1, 6],
          'australia': [44, 66],
          'bangladesh': [777, 88]}
```

```
In [44]: team_dict[india]
```

```
-----
NameError                                Traceback (most recent call last)
~\AppData\Local\Temp\ipykernel_10656\1590895598.py in <module>
----> 1 team_dict[india]

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

```
In [43]: teams=input("enter the team name ")
         print('the win percentage is ',team_dict[teams][0]/team_dict[teams][1])
```

```
enter the team name india
the win percentage is  0.5
```

```
In [50]: teams=input("enter the team name ")
         print('the win percentage is ',team_dict[teams][0]/team_dict[teams][1])
```

```
enter the team name pakistan
the win percentage is  0.6
```



```
In [2]: teamwinlist=[]  
for i in team_dict.keys():  
    teamwinlist.append(team_dict[i][0])
```

```
-----  
NameError                                Traceback (most recent call last)  
~\AppData\Local\Temp\ipykernel_9688\2618855642.py in <module>  
      1 teamwinlist=[]  
----> 2 for i in team_dict.keys():  
      3     teamwinlist.append(team_dict[i][0])  
  
NameError: name 'team_dict' is not defined
```

```
In [ ]: team_dict.keys()
```

```
In [64]: teamwinlist
```

```
Out[64]: [2, 3, 1, 44, 777]
```

```
In [ ]:
```

```
In [ ]:
```

```
In [ ]:
```

```
In [ ]:
```

```
In [ ]:
```