```
Dictionary - key and value are seperated by colon
each element is seperated by comma
dictionary is mutable
{Key:Value,Key1:Value}
```

In [1]:

```
dictionary = {"name":"Mike","phone number":"958746213","Dept":"Btech"}
```

In [2]:

```
type(dictionary)
```

Out[2]:

```
dict
```

In [5]:

```
dictionary["Dept"]
```

Out[5]:

```
'Btech'
```

In [7]:

```
for i in dictionary:
    print(i,dictionary[i])
```

```
name Mike
phone number 958746213
Dept Btech
```

In [9]:

```
import pandas as pd
Dictionary1 = pd.DataFrame(dictionary,index=(0,1,2))
Dictionary1
```

Out[9]:

	name	phone number	Dept
0	Mike	958746213	Btech
1	Mike	958746213	Btech
2	Mike	958746213	Btech

In [10]:

```
dictionary = {"name":["Mike","Raj","Raj"],"phone number":[958746213,56649898,484877787]
Dictionary1 = pd.DataFrame(dictionary,index=(0,1,2))
Dictionary1
```

Out[10]:

	name	phone number	Dept
0	Mike	958746213	Btech
1	Raj	56649898	CSE
2	Raj	484877787	IT

In [13]:

```
d=dict()
for i in range(1,21,2):
    d[i]=i*2
print(d)
```

```
{1: 2, 3: 6, 5: 10, 7: 14, 9: 18, 11: 22, 13: 26, 15: 30, 17: 34, 19: 38}
```

In [14]:

```
d=dict()
for i in range(1,21,2):
    d[i]=i**i*i
print(d)
```

```
{1: 1, 3: 81, 5: 15625, 7: 5764801, 9: 3486784401, 11: 3138428376721, 13: 39
37376385699289, 15: 6568408355712890625, 17: 140630844520677249910 09, 19: 37
589973457545958193355601}
```

In [15]:

```
d = {i:2*i for i in range (1,21,2)}
print (d)
```

```
{1: 2, 3: 6, 5: 10, 7: 14, 9: 18, 11: 22, 13: 26, 15: 30, 17: 34, 19: 38}
```

```
write a proram that prompts the user to enter a message . now count and print the
number of occurence of each character
```

In [16]:

```
did = {"fd":{"cs":90,"Math": 100,"Eng":56},
       "sd":{"cs":120,"Math": 10,"Eng":6}}
```

In [17]:

```
for k,v in did.items():
    print(k,v)
```

```
fd {'cs': 90, 'Math': 100, 'Eng': 56}
sd {'cs': 120, 'Math': 10, 'Eng': 6}
```

In [19]:

```
did.get("fd")
```

Out[19]:

```
{'cs': 90, 'Math': 100, 'Eng': 56}
```

In [20]:

```
did["fd"]
```

Out[20]:

```
{'cs': 90, 'Math': 100, 'Eng': 56}
```

write a proram that prompts the user to enter a message . now count and print the number of occurence of each character

In [25]:

```
msg = input("Enter the messgae: \n")
msg = msg.lower()
d = dict()
for word in msg:
    if word not in d:
        d[word] = 1
    else:
        d[word] = d[word]+1
print(d)
```

```
Enter the messgae:
Hello Arjun
{'h': 1, 'e': 1, 'l': 2, 'o': 1, ' ': 1, 'a': 1, 'r': 1, 'j': 1, 'u': 1,
'n': 1}
```

```
write a program to count the number of characters in the string and store them in a
dictionary datastructure
```

In [30]:

```
string = input("Enter a string: ")
l = len(string)
d = {string: len(string)}
```

```
Enter a string: aRJUN
```

In [32]:

```
d
```

Out[32]:

```
{'aRJUN': 5}
```

In [36]:

```
ord("@")
```

Out[36]:

```
64
```

```
Write a program that combines a list to a dictionary

```

In [38]:

```
a = ["Mike","Sars"]
r = ["start","stop"]
d = zip(a,r)
res = dict(d)
```

In [39]:

```
res
```

Out[39]:

```
{'Mike': 'start', 'Sars': 'stop'}
```

In [44]:

```
a = ["Mike","Sars"]
r = ["start","stop"]
d = zip(a,r)
d
```

Out[44]:

```
<zip at 0x1e1b3e61f40>
```

Write a program to make a quiz. Use zip function to extract the question into and answer into two seperate list

In [*]:

```
name = input("Enter Your Name: ")
unique_id = int(input("Enter Unique ID: "))
dep = input("Enter your Department: ")
while True:
    QUESTIONS = [
        ("1. What is a correct syntax to output 'Hello World' in Python?", 'print("Hell
        ("2. How do you insert COMMENTS in Python code?", "#"),
        ("3. Which keyword is used to loop over a given list of elements", "for" ),
        ("4. Which method can be used to return a string in upper case letters?", "uppe
        ("5. Which operator can be used to compare two values?", "=="),
        ("6. Which Bracket is used for creating a list?", "[]"),
        ("7. Which collection is ordered, changeable, and allows duplicate members?", '
        ("8. Which statement is used to stop a loop?","break"),
        ("9. How to count the length of the string entered?", "len()"),
        ("10. How to find the Datatype in Python?", "type()"),
    ]
    count = 0
    for question, correct_answer in QUESTIONS:
        answer = input(f"{question}? ")
        if answer == correct_answer:
            count +=  1
    if count > 6:
        print("Yayy !! That's a good score with",(count/len(QUESTIONS))*100,"%")
    else:
        print("Its okay! Try Again .You can score better than",(count/len(QUESTIONS))*1
    flag = input("Do you want to attend the test again. Enter yes to continue and exit
    if flag == "exit":
        break
    elif flag == "yes":
        pass
    else:
        print("Sorry, Enter an valid input")


```

Enter Your Name: