```
In [27]: dict1 = {1:"tax",2:"krishna",3:"dhruv",4:"tax"}
         print(dict1)
         for k in dict1.keys():
             print(k)
```

```
{1: 'tax', 2: 'krishna', 3: 'dhruv', 4: 'tax'}
1
2
3
4
```

(1) python program to add key-value pair in a dictionary.

```
In [2]: dict1 = {1:"tax",2:"krishna",3:"dhruv",4:"tax"}
        key = input("you have enter key:")
        value = input("you have enter value:")
        dict1[key] = value
        print(dict1)
```

```
you have enter key:5
you have enter value:ok
{1: 'tax', 2: 'krishna', 3: 'dhruv', 4: 'tax', '5': 'ok'}
```

(2) python program to check if a given key exist in a dictionary.

```
In [1]: dict1 = {1:"tax",2:"krishna",3:"dhruv",4:"tax"}
        key = int(input("you have enter key:"))
        if key in dict1.keys():
            print(dict1[key])
```

```
you have enter key:3
dhruv
```

(3) python program to count words in a string using dictionary.

```
In [4]: str1 = input("you have enter the string:")
        words=[]
        words = str1.split()
        f = (words.count(i) for i in words)
        dict2 = dict(zip(words,f))
        print(dict2)
```

```
you have enter the string:i am i am krishna.
{'i': 2, 'am': 2, 'krishna.': 1}
```

(4) python program to create dictionary of key from 1 to n and values are squre of key.

```
In [6]:  dict3 = {}
         n = int(input("you have enter key:"))
         for i in range(1,n+1):
             dict3[i]=i**2
         dict3
```

```
you have enter key:3
```

```
Out[6]:  {1: 1, 2: 4, 3: 9}
```

(6) python program to map two list into a dictionary.

```
In [2]:  key = ["1","2","3","4"]
         value = ["hi","hello","by","good"]
         dict1 = dict(zip(key,value))
         print(dict1)
```

```
{'1': 'hi', '2': 'hello', '3': 'by', '4': 'good'}
```

(7) python program to merge two dictionary.

```
In [6]:  dict1 = {1:"tax",2:"krishna",3:"dhruv",4:"tax"}
         dict2 = {5: "hi",6:"hello"}
         dict3 = dict2.copy()
         dict3.update(dict1)
         print(dict3)
```

```
{5: 'hi', 6: 'hello', 1: 'tax', 2: 'krishna', 3: 'dhruv', 4: 'tax'}
```

(8) python program to multiply all items into a dictionary.

```
In [17]:  dict1 = {"h1":10,"h2":20,"h3":30}
          k = 1
          for key in dict1:
              k = k*dict1[key]
          print(k)
```

```
6000
```

(9) python program to remove given key from a dictionary.

```
In [10]: dict1 = {1:"tax",2:"krishna",3:"dhruv",4:"piyush"}
         key = int(input("you have enter key:"))
         if key in dict1:
             del dict1[key]
         else:
             print("enter valid key.")
         print(dict1)
```

```
you have enter key:2
{1: 'tax', 3: 'dhruv', 4: 'piyush'}
```

(10) python program to find sum of items in a dictionary.

```
In [12]: dict1 = {1:"tax",2:"krishna",3:"dhruv",4:"piyush"}
         print(sum(dict1.keys()))
```

```
10
```