Working of Dictionaries

```
In [1]: tel_dir={"tom":2345,"jerry":4567,"mickey":3489}
        for name in tel_dir:
            print(name)      #print the keys in the dictionary

        tom
        jerry
        mickey
```

```
In [2]: tel_dir={"tom":2345,"jerry":4567,"mickey":3489}
        for name in tel_dir:
            print(name,":",tel_dir[name])     #print the key/value in the dictio

        tom : 2345
        jerry : 4567
        mickey : 3489
```

```
In [3]: 'tom' in tel_dir    #membership test
```

```
Out[3]: True
```

```
In [4]: 4567 in tel_dir   #membership test
```

```
Out[4]: False
```

```
In [5]: 4567 not in tel_dir #membership test
```

```
Out[5]: True
```

```
In [6]: #usage of keys()
        tel_dir.keys()  #returns only the keys
```

```
Out[6]: dict_keys(['tom', 'jerry', 'mickey'])
```

```
In [7]: tel_dir.values() #returns only the values
```

```
Out[7]: dict_values([2345, 4567, 3489])
```

```
In [8]: tel_dir.items() #returns the (key,value) pairs
```

```
Out[8]: dict_items([('tom', 2345), ('jerry', 4567), ('mickey', 3489)])
```

```
In [9]: list(tel_dir.keys())   # returns list of keys
```

```
Out[9]: ['tom', 'jerry', 'mickey']
```

```
In [10]: list(tel_dir.values())  # returns list of values

Out[10]: [2345, 4567, 3489]

In [11]: ls=list(tel_dir.keys())  # returns list of keys
         ls.append("donald")
         print(ls)

         ['tom', 'jerry', 'mickey', 'donald']

In [12]: print(tel_dir)

         {'tom': 2345, 'jerry': 4567, 'mickey': 3489}

In [13]: birthdays = {'Alice': 'Apr 1', 'Bob': 'Dec 12', 'Carol': 'Mar 4'} # init
         while True:
             print('Enter a name: (blank to quit)')
             name = input()
             if name == ' ':
                 break
             if name in birthdays:        #checks whether name is already in dicti
                 print(birthdays[name] , ' is the birthday of ' , name)
             else:
                 print('I do not have birthday information for ' , name)
                 print('What is their birthday?')
                 bday = input()
                 birthdays[name] = bday     #add the information to the dictionary
                 print('Birthday database updated.')
                 print(birthdays)
```

```
  File "<ipython-input-13-150f9404446a>", line 5
    if name == ' ':
               ^
SyntaxError: invalid character in identifier
```

```
In [14]: birthdays = {'Alice': 'Apr 1', 'Bob': 'Dec 12', 'Carol': 'Mar 4'} # init
         while True:
             print('Enter a name: (blank to quit)')
             name = input()
             if name == ' ':
                 break
             if name in birthdays:          #checks whether name is already in dicti
                 print(birthdays[name] , ' is the birthday of ' , name)
             else:
                 print('I do not have birthday information for ' , name)
                 print('What is their birthday?')
                 bday = input()
                 birthdays[name] = bday      #add the information to the dictionary
                 print('Birthday database updated.')
                 print(birthdays)
```

```
Enter a name: (blank to quit)
Alice
Apr 1  is the birthday of  Alice
Enter a name: (blank to quit)
Mamatha
I do not have birthday information for  Mamatha
What is their birthday?
Mar 8
Birthday database updated.
{'Alice': 'Apr 1', 'Bob': 'Dec 12', 'Carol': 'Mar 4', 'Mamatha': 'Mar 8'
Enter a name: (blank to quit)
```

In [ ]: