



Python Activity – 3

Topics: dictionary (dict) & set

Test on python shell

- 1. Create an empty dictionary, display size & it's type.
- 2. Given

- a. Display 'db2' value
- b. Replace mysql with pl/sql
- c. Display list of keys from DBI
- 3. Given

```
net_info={'interface':'eth0','type':'ethernet'}
```

- a. How to test key interface is existing or not
- b. If key interface is exists update interface type as eth1
- c. Display updated net_info dictionary





4. Write a python program

Given list structure

Emp = ["e123,ram,sales,pune,1000",

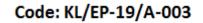
"e132,kumar,prod,bglore,3423",

"e456,arun,prod,chennai,2456",

"e544,vijay,hr,mumbai,6500"]

- a. create an empty dictionary and name it as Emp
- b. convert the above given list into dict format.
- c. display list of key, value pairs from EMP dict

Note:- employee id as a key, emp name as value





5. Given dictionary

```
conf={"f1":"/etc/passwd","f2":"/etc/group",
"f3": "/etc/sysconfig","f4":None
}
```

- a. Determine the size of conf dictionary
- b. Add new configuration file (/etc/pam.d)
- c. Using keys() and get() display key, value details



6. Given dict structure

Proc={'pid':12,'fs':'/proc','user':'root','sh':'/bin/bash'}

using pop() - delete 'fs' and 'sh' key entries

using del() - delete 'pid' and 'user' entries

what's the difference between pop() and del()

using popitem() - delete Proc structure

7. Write a python program:

Step 1: create a new file host.py

Step 2 : create an empty dict

Step 3 : use looping statements – 5times

- i) Read a hostname from <STDIN>
- ii) Read a IP-Address from <STDIN>
- iii) Add a input details to existing dict
- iv) with hostname as a key and IP address as it's value

Step 4 : display Key/ value details to monitor



8. Write a python program – modify the above program (host.py)

Step 1: read a hostname from <STDIN>

Step 2: Use membership operator to test whether the input hostname already exists or not.

Step 3: if it's exists already, display pop up message "Sorry your input hostname is exists".

Code: KL/EP-19/A-003



9. Identify the errors

```
a)
car = { "brand":
   "Ford" "model":
   "Mustang"
   "year": 1964
}
b) fs={ "ftype": "ext4", "proto": "tcp/ip", "port": 80}
print(fs["ext4"])
c) d={True:1,[]:"list"}
```



10. Open a python shell

- a. Filter common files from the above two sets
- b. Combine both sets into single set and omit duplicate elements.
- c. type cast to list



11. Predict the result of below set operations

```
S1={'data1','data2','data3'}
S2={'data2','data3','data4','data5'}
print(S1-S2)
print(S2-S1)
print(S1 ^ S2)
```

- 12. A. How to test if a specific value exists in a set?
 - B. Given set is $s=\{10,1.23,'data'\}$

How to add following items to an existing set

- I. Host="host01"
- II. L=["host02","host01","host03"]