DICTIONARY

- Dictionaries are mutable - (can modify its contents but Key must be unique and immutable)
- Unordered collection of elements (each item consist of a key and a value.)
- In the form of Key-Value Pairs which are enclosed in curly braces{}.
- In dictionary keys are unique but values can be duplicate.
- Keys are immutable but values are mutable.
- In dictionary, values can be retrieved only through keys create an empty dictionary which are as follows
- A = { } # A is an empty dictionary
- A = dict( ) # dict( ) method will create an empty dictionary.

delete the elements of dictionary:
- 1.By using del statement :
- 2. By using pop () function #here pop() function takes keys instead of position d={1:'a',2:'b',3:'c'}

get()-return the value of the required Key. e.g. d.get(1)	**clear()**-removes all items from the dictionary. e.g. d.clear()
items()-all the key value pair of dictionary in the form of list of tuples. d.items()	**keys()**-all the keys of dictionary in the form of List. e.g. d.keys()
values()-all the values of dictionary in the form of List. e.g. d.values()	**update()**-merge the key value air of two dictionary into one. e.g. d.update({4:'e',5:'f'})
setdefault() method returns the value of the item with the specified key. If the key does not exist, insert the key, with the specified value. e.g. d.setdefault(6,'g')	**max()** – returns key having maximum value. e.g. max(d)
Sorted()- sort by key or value e.g. sorted(d.items(),reverse=True) sorted(d)	Popitem()- this will delete last item of the dictionary. dictionaryname.popitem()

Find OUTPUT

What will be the result of the following code? >>>d1 = {"abc" : 5, "def" : 6, "ghi" : 7} >>>print (d1[0]) (a) abc (b) 5 (c) {"abc":5} (d) Error	Which of the following statement create a dictionary? a) d = { } b) d = {"john":40, "peter":45} c) d = (40 : "john", 45 : "peter"} d) All of the above
Which statement is correct for dictionary? 1. A dictionary is a ordered set of key:value pair 2. each of the keys within a dictionary must be unique 3. each of the values in the dictionary must be unique	Which is the correct form of declaration of dictionary? 1. Day={1:'monday',2:'tuesday',3:'wednesday'} 2. Day=(1;'monday',2;'tuesday',3;'wednesday') 3. Day=[1:'monday',2:'tuesday',3:'wednesday'] 4. Day={1'monday',2'tuesday',3'wednesday']

4. values in the dictionary are immutable	
Given employee={'salary':10000,'age':22,'name':'Mahesh'} employee.pop('age') what is output print(employee)	Write the ouput of following code: d={'amit':19,'vishal':20} print(d.keys())
What will be output of following: d = {1 : "SUM", 2 : "DIFF", 3 : "PROD"} for i in d: print (i)	Which of the following is the correct form of using dict()? a) dict([('a' , 45), ('b', 78)]) b) dict({'a' : 45, 'b' :78}) c) dict('a'=45, 'b'=78) d) All of these

Q1 WAP to accept the employee id from the user and display its detail from the dictionary. Data is stored in the dictionary in the following format. {empid:(empname,empsalary)}

Q2 WAP to accept the employee id from the user and check salary. If salary is less than 25000 then increase the salary by Rs 1000. Data is stored in the dictionary in the following format.{empid:(empname,empsalary)}

Q3 WAP to display the name of all the employees whose salary is more than 25000 from the following dictionary. emp={1:('aman',25000),2:('suman',30000),3:('raman',36000)}
format of data is given below: {empid:(empname,empsalary)}
Q4 WAP to count the frequency of each word in a given string accepted from the user using dictionary.

Q5 WAP to accept roll number,names and marks of five students and store the detail in dictionary using roll number as key. Also display the sum of marks of all the five students.

Q6 WAP to count the frequency of each character in a given string accepted from the user using dictionary.(store the character as key and it's frequency as value)

Q7 WAP which takes a key as an argument and check whether that key is present in dictionary or not.
Q8 Write a python program to arrange the values in a dictinary inascending order. For example original
        dictionary {1:21,2:32,3:25}
        expected output: [21,25,32]
Q9 WAP to join/merge/concatenate the following two dictionaries and create the new dictionary.
        d1={1:'amit',2:'suman'} d2={4:'ravi',5:'kamal'}
        new dictinary={1:'amit',2:'suman',4:'ravi',5:'kamal'}
Q10 WAP to add the values of given dictionary.d1={1:2,2:90,3:50}
Q11 WAP to add the keys of given dictionary. d1={1:2,2:90,3:50}
Q12 WAP to multiply all the values of given dictionary.d1={1:2,2:90,3:50}
Q13 WAP to accept a key from the user and remove that key from the dictionary if present.d1={1:2,2:90,3:50}
Q14 WAP in python to display the maximum and minimum value in dictionary.
Q15 WAP in python to remove the duplicate values from the dictionary. for example: original dictionary={1:'aman',2:'suman',3:'aman'}
new dictionary={1:'aman',2:'suman'}
Q16 Accept a key from the user and modify it's value.
Q17 Write a code to add the following key-value to a given dictionary. A={'class':'VI', 'Sec':'B','Rollno':1}
Q18 a={1:10,2:20,3:30}
    (a) Write code to delete the second element using del command.

(b) Write code to delete the third element using pop() function.

Q19 Write a statement in Python to declare a dictionary whose keys are 5, 8, 10 and values are May, August and October respectively.