

WORKSHEET – DICTIONARY

1	<p>What will be the output of following code-</p> <pre>a={1:"A",2:"B",3:"C"} for i in a: print(i,end=" ")</pre> <p>Ans:</p> <p>1 2 3</p>
2	<p>What will be the output of following code-</p> <pre>a={i: 'Hi!' + str(i) for i in range(5)} a</pre> <p>Ans:</p> <p>{0: 'Hi!0', 1: 'Hi!1', 2: 'Hi!2', 3: 'Hi!3', 4: 'Hi!4'}</p>
3	<p>What will be the output of following code-</p> <pre>D = dict() for i in range (3): for j in range(2): D[i] = j print(D)</pre> <p>Ans:</p> <p>{0: 1, 1: 1, 2: 1}</p>
4	<p>What will be the output of following code-</p> <pre>a={i: i*i for i in range(6)} a</pre> <p>Ans:</p> <p>{0: 0, 1: 1, 2: 4, 3: 9, 4: 16, 5: 25}</p>

5 What will be the output of following code-

```
a={}
a[2]=1
a[1]=[2,3,4]
print(a[1][1])
```

Ans:

3

6 What will be the output of following program:

```
dictionary = {1:'1', 2:'2', 3:'3'}
del dictionary[1]
dictionary[1] = '10'
del dictionary[2]
print(len(dictionary))
```

Ans:

2

7 Predict the Output:

```
dict1 = {"name": "Mike", "salary": 8000}
temp = dict1.pop("age")
print(temp)
```

Ans:

Key error

8 What will be the output of following program:

```
dict1 = {"key1":1, "key2":2}
dict2 = {"key2":2, "key1":1}
print(dict1 == dict2)
```

Ans:

True

9 What will be the output of following program:

```
dict={"Virat":1,"Rohit":2}
dict.update({"Rahul":2})
```

	<p>print(dict)</p> <p>Ans:</p> <p>{'Virat': 1, 'Rohit': 2, 'Rahul': 2}</p>
10	<p>What will be the output of following program:</p> <pre>a=dict() a[1]</pre> <p>Ans:</p> <p>Dictionary is empty so nothing will be printed</p>
11	<p>What will be the output of following program:</p> <pre>a={} a.fromkeys([1,2,3],"check")</pre> <p>Ans:</p> <p>{1: 'check', 2: 'check', 3: 'check'}</p>
12	<p>What will be the output of following program:</p> <pre>a={} a['a']=1 a['b']=[2,3,4] print(a)</pre> <p>Ans:</p> <p>{'a': 1, 'b': [2, 3, 4]}</p>
13	<p>What will be the output of following program:</p> <pre>a = {} a[1] = 1 a['1'] = 2 a[1.0]=4 count = 0 for i in a:</pre>

	<pre>count += a[i] print(count) Ans: 6</pre>
14	<p>What will be the output of following program:</p> <pre>test = {1:'A', 2:'B', 3:'C'} del test[1] test[1] = 'D' del test[2] print(len(test)) Ans: 2</pre>
15	<p>What will be the output of following program:</p> <pre>test = {1:'A', 2:'B', 3:'C'} test = {} print(len(test)) Ans: 0</pre>
16	<p>What will be the output of following program:</p> <pre>a={1:"A",2:"B",3:"C"} del a Ans: Nothing will be printed</pre>
17	<p>What will be the output of following program:</p> <pre>a={1:"A",2:"B",3:"C"} for i in a: print(i,end=" ")</pre>

	<p>Ans: 1 2 3</p>
18	<p>What will be the output of following program:</p> <pre>a={1:5,2:3,3:4} a.pop(3) print(a)</pre> <p>Ans:</p> <pre>{1: 5, 2: 3}</pre>
19	<p>What will be the output of following program:</p> <pre>a={1:5,2:3,3:4} print(a.pop(4,9)) print()</pre> <p>Ans:</p> <pre>9</pre>
20	<p>What will be the output of following program:</p> <pre>a={1:"A",2:"B",3:"C"} a.setdefault(4,"D") print(a)</pre> <p>Ans:</p> <pre>{1: 'A', 2: 'B', 3: 'C', 4: 'D'}</pre>
21	<p>What will be the output of following program:</p> <pre>a={1:"A",2:"B",3:"C"} print(a.setdefault(3))</pre> <p>Ans:</p>

	<p>C</p>
22	<p>What will be the output of following program:</p> <pre> a={1:"A",2:"B",3:"C"} b=a.copy() b[2]="D" print(a) </pre> <p>Ans: {1: 'A', 2: 'B', 3: 'C'}</p>
23	<p>What will be the output of the program?</p> <pre> a = {} a[1] = 1 a['1'] = 2 a[1]=a[1]+1 count = 0 for i in a: count += a[i] print(count) </pre> <p>Ans: 4</p>
24	<p>What will be the output of following program:</p> <pre> box = {} jars = {} crates = {} box['biscuit'] = 1 box['cake'] = 3 jars['jam'] = 4 crates['box'] = box crates['jars'] = jars print(len([crates])) </pre>

	<p>Ans:</p> <p>1</p>
25	<p>What will be the output of following program:</p> <pre>dict = {'c': 97, 'a': 96, 'b': 98} for _ in sorted(dict): print (dict[_])</pre> <p>Ans:</p> <p>96 98 97</p>
26	<p>What will be the output of following program:</p> <pre>rec = {"Name" : "Python", "Age":"20"} r = rec.copy() print(id(r) == id(rec))</pre> <p>Ans:</p> <p>False</p>
27	<p>What will be the output of following program:</p> <pre>rec = {"Name" : "Python", "Age":"20", "Addr" : "NJ", "Country" : "USA"} id1 = id(rec) del rec rec = {"Name" : "Python", "Age":"20", "Addr" : "NJ", "Country" : "USA"} id2 = id(rec) print(id1 == id2)</pre> <p>Ans:</p> <p>False</p>
28	<p>What will be the output of following program:</p> <pre>my_dict = {} my_dict[(1,2,4)] = 8 my_dict[(4,2,1)] = 10</pre>

```

my_dict[(1,2)] = 12
sum = 0
for k in my_dict:
    sum += my_dict[k]
print (sum)
print(my_dict)

```

Ans:

30

{(1, 2, 4): 8, (4, 2, 1): 10, (1, 2): 12}

29 **What will be the output of following program:**

```

my_dict = {}
my_dict[1] = 1
my_dict['1'] = 2
my_dict[1.0] = 4
sum = 0
for k in my_dict:
    sum += my_dict[k]
print (sum)

```

Ans:

6

30 **What will be the output of following program:**

```

arr = {}
arr[1] = 1
arr['1'] = 2
arr[1] += 1
sum = 0
for k in arr:
    sum += arr[k]
print (sum)

```


	<p>Ans:</p> <p>4</p>
31	<p>What will be the output of following program:</p> <pre>a = {'a':1,'b':2,'c':3} print (a['a','b'])</pre> <p>Ans:</p> <p>Key error</p>
32	<p>What will be the output of following program:</p> <pre>a = {(1,2):1,(2,3):2} print(a[1,2])</pre> <p>Ans:</p> <p>1</p>
33	<p>What will be the output of following program:</p> <pre>a={ 1:'a', 2:'b', 3:'c'} for i,j in a.items(): print(i,j,end="#")</pre> <p>Ans:</p> <p>1 a#2 b#3 c#</p>
34	<p>What will be the output of following program:</p> <pre>aList = [1,2,3,5,6,1,5,6,1] fDict = {} for i in aList: fDict[i] = aList.count(i) print (fDict)</pre> <p>Ans:</p> <p>{1: 3, 2: 1, 3: 1, 5: 2, 6: 2}</p>
35	<p>What will be the output of following program:</p>

```

plant={}
plant[1]='Rohit'
plant[2]='Sharma'
plant['name']='Ishant'
plant[4]='Sharma'
print (plant[2])
print (plant['name'])
print (plant[1])
print (plant)

```

Ans:

Sharma

Ishant

Rohit

{1: 'Rohit', 2: 'Sharma', 'name': 'Ishant', 4: 'Sharma'}

36 **What will be the output of following program:**

```

dict = {'Name': 'Rohit', 'Age': 30}
print (dict.items())

```

Ans:

dict_items([('Name', 'Rohit'), ('Age', 30)])

37 **Write a Python program to iterate over dictionaries using for loops**

Ans:

```

d = {"blue" : 1, "green" : 2, "yellow" : 3}
for key,value in d.items():
    print(key, value)

```

38 **Write a Python script to merge two Python dictionaries**

Ans:

```

d1 = {"a": "100", "b": "200"}

```

```
d2 = {"x": "4", "y": "500"}
d = d1.copy()
d.update(d2)
print(d)
print(d1.keys())
print(d1)
print(d1.values())
```

39 **Write a Python program to get the maximum and minimum value in a dictionary.**

Ans:

```
d1 = {"a": 500, "b": 200, "c": 50, "d": 150}
print(d1)
d = sorted(d1)
min=d[0]
max=d[-1]
print(min, "has min val")
print(max, "Has max val")
```

40 **Write a Python program to multiply all the items in a dictionary**

Ans:

```
d = {'n1': 5, 'n2': 2, 'n3': 3}
res = 1
for key in d:
    res= res*d[key]
print(res)
```

41 **Write a Python program to remove duplicates from Dictionary**

Ans:

```
dict = {'one': 1, 'two': 2, 'three': 3, 'four': 1}
#print(dict)
```

```
#print(dict.items())
res = {}
for key,value in dict.items():
    if value not in res.values():
        res[key] = value
print(res)
```

42 **Write a Python program to check a dictionary is empty or not.**

Ans:

```
my_dict = {}
if not bool(my_dict):
    print("Dictionary is empty")
else:
    print("Dictionary is not empty")
```

43 **Write a Python program to sum all the items in a dictionary.**

Ans:

```
dict = {'n1': 1, 'n2': 2, 'n3': 3}
print(sum(dict.values()))
```

44 **Write a Python script to concatenate following dictionaries to create a new one**

.

```
dic1 = {1:10,2:20}
dic2 = {3:30,4:40}
dic3 = {5:50,6:60}
```

Ans:

```
dic = {}
dic1 = {1:10,2:20}
dic2 = {3:30,4:40}
dic3 = {5:50,6:60}
```

```
for d in (dic1, dic2, dic3):
    dic.update(d)
print(dic)
```

45 **Python Program to Add a Key-Value Pair to the Dictionary**

Ans:

```
key=int(input("Enter the key (int) to be added:"))
value=int(input("Enter the value for the key to be added:"))
d={}
d.update({key:value})
print("Updated dictionary is:")
print(d)
```

46 **Python Program to Check if a Given Key Exists in a Dictionary or Not**

Ans:

```
d={'A':1,'B':2,'C':3}
key=input("Enter key to check:")
if key in d.keys():
    print("Key is present and value of the key is:")
    print(d[key])
else:
    print("Key isn't present!")
```

47 **Python Program to Generate a Dictionary that Contains Numbers (between 1 and n) in the Form (x,x*x).**

Ans:

```
n=int(input("Enter a number:"))
d={x:x*x for x in range(1,n+1)}
print(d)
```

48 **Python Program to Create a Dictionary with Key as First Character and Value as Words Starting with that Character.**

Ans:

```
test_string=input("Enter string:")
l=test_string.split()
d={}
for word in l:
    if(word[0] not in d.keys()):
        d[word[0]]=[]
        d[word[0]].append(word)
    else:
        if(word not in d[word[0]]):
            d[word[0]].append(word)
for k,v in d.items():
    print(k,":",v)
```

49 **Write a program in python using dictionary to print the name and salary of employee.**

Ans:

```
names=[]
dept=[]
salary=[]
details={'Emp Name':names,'Department':dept,'Salary':salary}
rec=int(input('How many records U want to insert'))
for i in range(rec):
    n=input('Enter Emp name::')
    names.append(n)
    d=input('Enetr Emp Department::')
    dept.append(d)
    s=int(input('Enetr Emp salary::'))
    salary.append(s)
```

```
for key,val in details.items():  
    print(key, "=>", val)
```

50

Write a program to count the frequency of each character in string using dictionary.

Ans:

```
test_str=input('enter any string\n')  
all_freq = {}  
for i in test_str:  
    if i in all_freq:  
        all_freq[i] += 1  
    else:  
        all_freq[i] = 1  
print ((all_freq))
```