Python Assignment -3

Q1.Given a dictionary of students and their favourite colours: people={'Arham':'Blue','Lisa':'Yellow',"Vinod:'Purpl e',Jenny':'Pink'}

1. Find out how many students are in the list
2. Change Lisa's favourite colour
3. Remove 'Jenny' and her favourite colour
4. Sort and print students and their favourite colours alphabetically by name

+ Code + Text

```
people= dict(Abraham="Blue",Lisa="Yellow",Vinod="Purple",Jenny="Pink")
print("Students :",people)

s=len(people)
print("No of Students :",s)

people["Lisa"]="Black"
print("Updated :",people)

del people['Jenny']
print("New updated dictionary",people)

s=sorted(people.items())
print("Sorted :",s)
```

```
Students : {'Abraham': 'Blue', 'Lisa': 'Yellow', 'Vinod': 'Purple', 'Jenny': 'Pink'}
No of Students : 4
Updated : {'Abraham': 'Blue', 'Lisa': 'Black', 'Vinod': 'Purple', 'Jenny': 'Pink'}
New updated dictionary {'Abraham': 'Blue', 'Lisa': 'Black', 'Vinod': 'Purple'}
Sorted : [('Abraham', 'Blue'), ('Lisa', 'Black'), ('Vinod', 'Purple')]
```

Q2.Write a python program Convert two lists into a dictionary

```
l1=["Name","Age","Salary"]
l2=["Anu",24,20000]
d=dict(zip(l1,l2))
print("Dictionary :",d)
```

```
Dictionary : {'Name': 'Anu', 'Age': 24, 'Salary': 20000}
```

Q3.Write a python program to check if a value exists in a dictionary.

```
d=dict(Name="Anu",Age=24,Salary=10000)
print("Dictionary :",d)
"Anu" in d.values()
```

```
Dictionary : {'Name': 'Anu', 'Age': 24, 'Salary': 10000}
True
```

or

```
d={"name":"John","age":24,"Salary":20000}
v = "John"
if v in d.values():
    print("Value Exists in the Dictionary .")
else:
    print("Value Does NOt Exists in the Dictionary.")
```

```
Value Exists in the Dictionary .
```

Q4.Write a python program to reverse a tuple.

```
a=tuple("python")
print("Tuple a :",a)
b=tuple(reversed(a))
print("Reversed :",b)
```

```
Tuple a : ('p', 'y', 't', 'h', 'o', 'n')
Reversed : ('n', 'o', 'h', 't', 'y', 'p')
```

or

```
a=tuple("python")
print("Tuple :",a)
b=a[::-1]
print("Reversed tuple :",b)
```

```
Tuple : ('p', 'y', 't', 'h', 'o', 'n')
Reversed tuple : ('n', 'o', 'h', 't', 'y', 'p')
```

Q5.Write a python program to unpack the tuple to desired values.

```
#packing
t=(1,2,3,4,5,)
print("Tuple :",t)
#unpacking
l,m,n,o,p=t
print("l :",l)
print("m :",m)
print("n :",n)
print("o :",o)
print("p :",p)
```

```
Tuple : (1, 2, 3, 4, 5)
l : 1
m : 2
n : 3
o : 4
p : 5
```

Q6. Write a python program to count the number of occurrences of a specific element in tuple.

```
t=(10,20,30,50,20,60,10,20)
c=t.count(20)
print("Count of Element :",c)
```

```
Count of Element : 3
```

or

```
t=(10,20,30,50,20,60,10,20)
c=20
count=0
for i in t:
    if i==c:
        count+=1
print("The count of Element",c,"is :",count)
```

```
The count of Element 20 is : 3
```

Q7. Write a python program to demonstrate the different string formatting methods available in python.

1]Formatting with % operator:

```
name = "Anu"
s="Hi.... %s !"%name
print(s)
```

```
Hi.... Anu !
```

```
name="Anu"
age=24
s="%s is %d years old."%(name,age)
print(s)
```

```
Anu is 24 years old.
```

```
a=2456.1253
print("%5.2f"%a)
print("%10.2f"%a)
print("%.2f"%a)
```

```
2456.13
   2456.13
2456.13
```

2]Formating with format() method

```
s="Hello... {}".format("Anu")
print(s)
```

```
Hello... Anu
```

```
s="{0} is {1} years old.".format("Anu",21)
print(s)
```

```
Anu is 21 years old.
```

```
s="{} is {} years old.".format("Annu",12)
print(s)
```

```
Annu is 12 years old.
```

```
s="{a} is {b} years old.".format(a="Anu",b=12)
print(s)
```

```
Anu is 12 years old
```

3] f-string

```
module="python"
course="DBDA"
print(f"I am studying {module} in {course}")
```

```
I am studying python in DBDA
```

```
a=10
b=30
print(f"Sum of {a} and {b} is :{ a+b}")
```

```
Sum of 10 and 30 is :40
```

```
num=12
print(f"Is number even:{True if num%2==0 else False}")
```

```
Is number even:True
```

4] Template String

```
import string

module="Python"
course="PGDBDA"
n=string.Template("Iam studying $m in $c")
print(n.substitute(m=module,c=course))
```

```
Iam studying Python in PGDBDA
```

Q8Write a python program to add a new list inside an existing list. (Use nested list)

```
l1=[1,2,3,4]
print("List :",l1)
l2=[5,6,7,8,9,10]
l1.append(l2)
print("New List :",l1)
```

```
List : [1, 2, 3, 4]
New List : [1, 2, 3, 4, [5, 6, 7, 8, 9, 10]]
```