Assignment on Lists Tuple & Dictionary

1)
```
inp = ["This", "list", "contains", "seven", "strings", "in", "total."]
out = []
for i in inp:
   out.append(i[0])
print(out)
```

Output :
["T","l","c","s","s","i","t"]

2)
```
inp = "In computer science, a data structure is a data organization, management, and storage format that enables efficient access and modification"
inp = inp.split()
out = []
a = input("Enter any alphabet : ")
for i in inp:
   if a == i[0] or a.upper() == i[0]:
      out.append(i)
print(out)
```

Output :
Enter any alphabet : d
["data","data"]

3)
```
tup = (2,4,6,3,5,6,8,1,3)
sl = tup[3:5]
print(sl)
sl = tup[:5]
print(sl)
sl = tup[3:]
print(sl)
sl = tup[:]
print(sl)
sl = tup[-8:-4]
print(sl)
tup = ("HELLO WORLD")
sl = tup[2:9:2]
print(sl)
sl = tup[::4]
print(sl)
sl = tup[9:2:-4]
print(sl)
```

Output :

```
(3,5)
(2,4,6,3,5)
(3,5,6,8,1,3)
(2,4,6,3,5,6,8,1,3)
(4,6,3)
("LOWR")
("LO")
("W")
```

4)
```
lst =[1,2,7,3,(6,5),4]
counter = 0
for i in lst:
    if isinstance(i, tuple):
        break
    counter += 1
print("NUMBER OF ELEMENTS :\n",counter)
```

Output :

```
NUMBER OF ELEMENTS : 4
```

5)
```
employee = {'Rabi':{'age': 27,'sex': 'Male','salary':10000},'Rani': {'age': 22, 'sex':
'Female','salary':20000},'Kamala': {'age': 25, 'sex': 'Female','salary':50000}}
for k in employee:
  print("name=",k,'\n')
 print("info=",employee[k],"\n")
```

Output :

```
Rabi
info={'age': 27,'sex': 'Male','salary':10000}
Rani
info={'age': 22, 'sex': 'Female','salary':20000}
Kamala
info={'age': 25, 'sex': 'Female','salary':50000}
```

6)
```
bill={"potato":10,"mango":20,"tomato":30,"apple":40,"guava":50,"onion"=30}
x=input("Enter items=")
a=0
lst=x.split(" ")
for key in bill:
    for item in lst:
        if key==item:
            a=a+bill[key]
print("Total bill=",a)
```

Output :
Enter items=potato onion tomato apple
Total bill=110

7)
```
birthdays = {2:15.02.01,5:20.04.02,3:5.5.03, 4:25.11.02,1:17.01.00}
for i in sorted(birthdays.items()):
    print(i)
name = input("Enter the name of the person: ")
if name in birthdays.keys():
    print("Birthday is on: ", birthdays[name])
else:
    print("Birthday of the person not found!")
    birthdays[name] = input("Enter the birthday: ")
    print("Now the birthdays dictionary is- ")
    for i in sorted(birthdays.items()):
        print(i)
```

Output :
{1:17.01.00,2:15.02.01,3:5.5.03,4:25.11.02,5:20.04.02}
Enter the name of the person : 6
Birthday of the person not found!
Enter the birthday : 14.09.01
Now the birthday dictionary is : {1:17.01.00, 2:15.02.01, 3:5.5.03, 4:25.11.02, 5:20.04.02
,6:14.09.01}