

ASSIGNMENT 2B

Q1.

```
1 #Given two list names and marks for names of students and their marks.
2 #Create a dictionary which will contain student student name as key and marks as its value
3
4 #ISHIKA KHOKHANI S13-39
5
6 n=int(input("Enter number of students: "))
7 sub=int(input("Enter number of subjects for marks: "))
8 students=dict()
9 for i in range(0,n):
10     name=input("Enter your name: ")
11     marks=[]
12     for j in range(0,sub):
13         mark=int(input("Enter your marks: "))
14         marks.append(mark)
15     students[name]=marks
16 print("Student dictionary is created: ")
17 print(students)
```

```
Enter number of students: 3
Enter number of subjects for marks: 2
Enter your name: abc
Enter your marks: 45
Enter your marks: 65
Enter your name: def
Enter your marks: 50
Enter your marks: 44
Enter your name: ghi
Enter your marks: 30
Enter your marks: 80
Student dictionary is created:
{'abc': [45, 65], 'def': [50, 44], 'ghi': [30, 80]}

Process finished with exit code 0
```

Q2.

```
#Create a dictionary for employee record. Each employee record stores empno,ename,number of hours worked
#If total number of overtime hours are 10 or more, add overtime salary of Rs. 500 per hour for that employee
#otherwise if of overtime hours are less than 10, add overtime salary of Rs.250 per hour.
#no overtime is done then no overtime salary is paid.
#ISHIKA KHOKHANI S13-39
n=int(input("Enter number of employees: "))
employee=dict()
for i in range(0,n):
    sal=0
    empno=int(input("Enter employee number: "))
    ename=input("Enter employee name: ")
    hours=int(input("Enter number of hours worked overtime a week: "))
    if(hours>=10):
        sal=sal+(500*hours)
    elif(hours==0):
        sal=0
    else:
        sal=sal+(250*hours)
    employee[ename]=[empno,hours,sal]
print("Employee records are: ")
print(employee)
```

```

Enter number of employees: 2
Enter employee number: 1234
Enter employee name: ABC
Enter number of hours worked overtime a week: 15
Enter employee number: 5678
Enter employee name: DEF
Enter number of hours worked overtime a week: 13
Employee records are:
{'ABC': [1234, 15, 7500], 'DEF': [5678, 13, 6500]}

Process finished with exit code 0

```

Q3.

```

tup=(4,5,6,2,3,4,5,1,2,6,4)
x={}
for m in tup:
    x[m]=tup.count(m)
x

```

{1: 1, 2: 2, 3: 1, 4: 3, 5: 2, 6: 2}

Q4.

```

std_record={}
roll_no=[]
name=[]
marks=[]
x=int(input("Enter number of students :"))
for i in range(x):
    roll_no.append(int(input("Enter the roll no of the student :")))
    name.append(input("Enter the name of the student :"))
    ml=int(input("Enter the marks in ML :"))
    pyth=int(input("Enter the marks in Python :"))
    marks.append((ml,pyth))
for i in range(x):
    std_record[roll_no[i]]=(name[i],marks[i])
std_record

```

Enter number of students :3
Enter the roll no of the student :39
Enter the name of the student :ABC
Enter the marks in ML :45
Enter the marks in Python :90
Enter the roll no of the student :40
Enter the name of the student :DEF
Enter the marks in ML :70
Enter the marks in Python :20
Enter the roll no of the student :35
Enter the name of the student :IGH
Enter the marks in ML :55
Enter the marks in Python :35
{35: ('IGH', (55, 35)), 39: ('ABC', (45, 90)), 40: ('DEF', (70, 20))}

Q5.

```

marks={'Physics':65,'Chemistry':70,'Maths':67,'Biology':80}
x=[(key,val) for key,val in marks.items()]
x.reverse()
x

```

[('Biology', 80), ('Maths', 67), ('Chemistry', 70), ('Physics', 65)]