

Kalyani Government Engineering College

Department of Computer Application
Python Programming Lab – MCAN191
Year: 2023-2024
Semester: 1st Semester
Assignment 6
Name: Madhusudan Chand Roll: 13

6.1 Write a program that reads a string from keyboard and prints the unique words. Your program should convert input string to lower case.

Code:

```
x=input("Enter the string\n")
s=x.lower()
d=dict()
for i in s:
    if i not in d:
        d[i]=1
    else:
        d[i]=d[i]+1

for key,value in d.items():
    if value==1:
        print(key,end=" ")
```

Output:
Enter the string
Madhusudan
m h s n

6.2 Write a program to print all elements in a list those have only single occurrence.

Code:

```
l=[7, 5, 5, 1, 6, 7, 8, 7, 6]
d=dict()
for i in l:
    if i not in d:
        d[i]=1
    else:
        d[i]=d[i]+1
```

```

for i in d:
    if d[i]==1:
        print(i,end=" ")

```

Output:
1 8

6.3 Write a program to enter names of employees and their salaries as input and store them in a dictionary.

Code:

```

def inputdic():
    d=dict()
    while True:
        x=input("Enter the name(enter \"exit\"for exit)\n")
        if x == "exit":
            print(d)
            break
        f=float(input("Enter the salary\n"))
        d[x]=f

inputdic()

```

Output:

```

Enter the name(enter "exit"for exit)
Madhu
Enter the salary
34000
Enter the name(enter "exit"for exit)
Bijay
Enter the salary
36000
Enter the name(enter "exit"for exit)
exit
{'Madhu': 34000.0, 'Bijay': 36000.0}

```

6.4 Write a program to read 6 numbers and create a dictionary having keys EVEN and ODD. Dictionary's value should be stored in list

Code:

```
def addtodic():
    d=dict()
    odd=[]
    even=[]
    for i in range(6):
        x=int(input("Enter any integer\n"))
        if x%2 == 0:
            even.append(x)
        else:
            odd.append(x)
    d["Even"]=sorted(odd)
    d["Odd"]=sorted(even)
    print(d)

addtodic()
```

Output:

```
Enter any integer
53
Enter any integer
90
Enter any integer
62
Enter any integer
42
Enter any integer
67
Enter any integer
70
{'Even': [53, 67], 'Odd': [42, 62, 70, 90]}
```

6.5 Write a program that reads string from user. Your program should create a dictionary having key as word length and value is count of words of that length

Code:

```
text = input('Enter a sentence: ')
```

```

words = text.split()
d = {}
for word in words:
    if len(word) in d:
        d[len(word)] += 1
    else:
        d[len(word)] = 1
print(d)

```

Output:
Enter a sentence: a fat cat is on the mat
{1: 1, 3: 4, 2: 2}

6.6 Write a program to input roll numbers and their names of students of your class and store them in the dictionary as the key-value pair. Perform the following operations on the dictionary:
a) Display the Roll numbers and name for all students. b) Add a new key-value pair in this dictionary and display the modified dictionary c) Delete a particular student's record from the dictionary d) Modify the name of an existing student

```

Code:
student = {}

print('Enter student details')
while True:
    roll_number = int(input('Enter your 6 digit roll number: '))
    if roll_number in student:
        print('Roll Number Already Exists')
    else:
        name = input('Enter name: ')
        student[roll_number] = name
        print('Record added')
    ans = input('Do you want to continue(y/n)? ')
    if ans in 'nN':
        break

```

```

#####
# a) Display the Roll numbers and name for all students

```

```
#####

print('\nRoll Number','Name')
for roll_number in student:
    print(roll_number,'\t\t',student[roll_number])

#####
# b) Add a new key-value pair in this dictionary and display
#####

print('\nEnter a new record ')
roll_number = int(input('Enter your 6 digit roll number: '))
if roll_number in student:
    print('Roll Number Already Exists')
else:
    name = input('Enter name: ')
    student[roll_number] = name
    print('Record added\n')

for roll_number in student:
    print(roll_number,'\t\t',student[roll_number])

#####
# c) Delete a particular student's record from the dictionary
#####

print('\nDelete a record ')
roll_number = int(input('Enter roll number: '))
if roll_number in student:
    del student[roll_number]
    print('Record deleted')
else:
    print('Record not found')

#####
# d) Modify the name of an existing students.
#####

print('\nModify a record')
roll_number = int(input('Enter new 6 digit roll number: '))

if roll_number in student:
    name=input('Modify name ')
    student[roll_number] = name
    print('Record updated')
else:
```

```
print('Record not found')
```

Output:

Enter student details

Enter your 6 digit roll number: 560001

Enter name: Madhusudan

Record added

Do you want to continue(y/n)? n

Roll Number Name

560001	Madhusudan
--------	------------

Enter a new record

Enter your 6 digit roll number: 760001

Enter name: Bijay

Record added

560001	Madhusudan
--------	------------

760001	Bijay
--------	-------

Delete a record

Enter roll number: 760001

Record deleted

Modify a record

Enter new 6 digit roll number: 760001

Record not found