

# 2<sup>ND</sup> COMPUTER SCIENCE

## LAB MANUAL

1. Write a program to create a phone contact book and also to do search, update and delete contact.

AIM: To write a program to create a phone contact book and also to do search, update and delete contact

```
pb={ }
def addcontact():
    ans='y'
    while ans=='y':
        na=input("Enter name:")
        no=int(input("Enter mobile number:"))
        nc=str(no)
        if len(nc)==10:
            pb[na]=no print("Contact saved successfully")
        else:
            print("Invalid number.Enter correct number")
            continue ans=input("Do you want to add another contact(y/n):")
def searchcontact():
    na=input("Enter the name which you want to search:")
    if na in pb:
        print("Mobile number :",pb[na])
    else:
        print("Name not in contact book")
def updatecontact():
    na=input("Enter the name which you want to update:")
    if na in pb :
        no=int(input("Enter the new number"))
        nc=str(no)
        if len(nc)==10:
            pb[na]=no print("Contact number updated")
        else:
            print("Invalid number.Contact not updated.")
    else:
        print("Name not in contact book")
def deletecontact():
    na=input("Enter the name which you want to delete the contact:")
    if na in pb:
        del pb[na]
```

```
        print("Contact deleted")
    else:
        print("Name not in contact book")

while True:
    print("Phone contact book")

    print("1-to add contact\n2-to search contact\n3-to update contact\n4-to delete\n5-to quit")
    ch=int(input("Enter your choice:"))
    if ch==1:
        addcontact()
    elif ch==2:
        searchcontact()
    elif ch==3:
        updatecontact()
    elif ch==4:
        deletecontact()
    elif ch==5:
        break
    else:
        print("Invalid choice.Give correct choice")
        continue
```

OUTPUT:

Phone contact book

1-to add contact

2-to search contact

3-to update contact

4-to delete contact

5-to quit Enter your choice:

1 Enter name:anandh

Enter mobile number:7894561230

Contact saved successfully

Do you want to add another contact(y/n):y

Enter name:joy

Enter mobile number:9876543214

Contact saved successfully

Do you want to add another contact(y/n):n

Phone contact book

**RESULT:** Thus the above program has been executed successfully and the output is verified.

2. Read a text file line by line and display each word separated by a #.

```
a=open('sample.txt','r')
b=a.readline()
while b:
    c=b.split()
    last=c.pop()
    for i in c:
        print(i,'#',end="")
    print(last)
    print()
    b=a.readline()
a.close()
```

FILE CONTENT : I am a computer science student.

I am learning python programming

OUTPUT: I #am #a #computer #science #student.

I #am #learning #python #programming.

**RESULT:** Thus the above program has been executed successfully and the output is verified.

3. Read a text file and display the number of vowels/consonants/uppercase/lowercase characters in the file.

AIM: To read a text file and display the number of vowels/consonants/uppercase/lowercase characters in the file.

PROGRAM:

```
a=open('sample.txt','r')
b=a.read()
v=c=uc=lc=0
vowels=['a','e','i','o','u']
for i in b:
    if i.lower() in vowels:
        v+=1
    else:
        c+=1
    if i.isupper():
        uc+=1
    elif i.islower():
        lc+=1
print("The number of vowels in the file is :",v)
print("The number of consonants in the file is :",c)
print("The number of upper case letters in the file is :",uc)
print("The number of lower case letters in the file is :",lc)
a.close()
```

FILE CONTENT : I am a computer science student.  
I am learning python programming.

OUTPUT: The number of vowels in the file is : 20  
The number of consonants in the file is : 46  
The number of upper case letters in the file is : 2  
The number of lower case letters in the file is : 52

RESULT: Thus the above program has been executed successfully and the output is verified

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