TE IT

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Shell programming Write a program to implement an address book with options given below: a) Create address book. b) View address book. c) Insert a record. d) Delete a record. e) Modify a record. f) Exit.


```
createAddressBook()
{
    echo
    read -p "Enter no. of records: " n

    for((i=0; i<n; i++))
    do
        echo
        echo "Enter ID"
        read ID[i]
        echo "Enter name"
        read name[i]
        echo "Enter address"
        read address[i]
        echo "Enter phone_no"
        read phone_no[i]
    done
}

displayRecords()
{
    echo
    echo "ID   NAME     ADDRESS     PHONE_NO"
    for((i=0; i<n; i++))
    do
        echo "${ID[i]}    ${name[i]}    ${address[i]}     ${phone_no[i]}"
    done
}

insertRecord()
{
```

```bash
        echo
        echo "Enter ID to insert"
        read ins_id

        for((i=0; i<n; i++))
        do
                if test "$ins_id" == "${ID[i]}"
                then
                        echo
                        echo "ID already exists"
                        dup_id=1
                fi
        done

        if test "$dup_id" != 1
        then
                ID[n]=$ins_id
                echo "Enter name"
                read name[n]
                echo "Enter address"
                read address[n]
                echo "Enter phone_no"
                read phone_no[n]
                n=$((n+1))
        fi
}

deleteRecord()
{
        echo
        echo "Enter index of record to delete"
        read del_pos

        for((i=del_pos; i<n-1; i++))
        do
                ID[i]=${ID[i+1]}
                name[i]=${name[i+1]}
                address[i]=${address[i+1]}
                phone_no[i]=${phone_no[i+1]}
        done
        n=$((n-1))
}
```

```
modifyRecord()
{
    echo
    echo "Enter ID to modify"
    read mod_id
    is_mod=0

    for((i=0; i<n; i++))
    do
        if test "$mod_id" == "${ID[i]}"
        then
            echo "Enter name"
            read name[i]
            echo "Enter address"
        read address[i]
        echo "Enter phone_no"
        read phone_no[i]
            is_mod=1
        fi
    done

    if test "$is_mod" == 0
    then
        echo
        echo "ID does not exist"
    fi
}

exitFunction()
{
    echo
    echo "EXITING"
    echo
    break
}

createAddressBook

while :
do
```

```
echo
echo "ADDRESS BOOK"
echo "1. View"
echo "2. Insert"
echo "3. Delete"
echo "4. Modify"
echo "5. Exit"
echo

echo "Enter choice"
read choice

if test "$choice" == 1
then
      displayRecords
fi

if test "$choice" == 2
then
      insertRecord
fi

if test "$choice" == 3
then
      deleteRecord
fi

if test "$choice" == 4
then
      modifyRecord
fi

if test "$choice" == 5
then
      exitFunction
fi

done
```

Output:

Enter no. of records: 2

Enter ID
1
Enter name
amey
Enter address
pune
Enter phone_no
9832456824

Enter ID
2
Enter name
a⯑ ⯑yatish
Enter address
pune
Enter phone_no
9983452819

ADDRESS BOOK
1. View
2. Insert
3. Delete
4. Modify
5. Exit

Enter choice
1

ID	NAME	ADDRESS	PHONE_NO
1	amey	pune	9832456824
2	yatish	pune	9983452819

ADDRESS BOOK
1. View
2. Insert
3. Delete
4. Modify

5. Exit

Enter choice
2

Enter ID to insert
3
Enter name
rahul
Enter address
nashik
Enter phone_no
9867342105

ADDRESS BOOK
1. View
2. Insert
3. Delete
4. Modify
5. Exit

Enter choice
1

ID	NAME	ADDRESS	PHONE_NO
1	amey	pune	9832456824
2	yatish	pune	9983452819
3	rahul	nashik	9867342105

ADDRESS BOOK
1. View
2. Insert
3. Delete
4. Modify
5. Exit

Enter choice
3

Enter index of record to delete
1

ADDRESS BOOK
1. View
2. Insert
3. Delete
4. Modify
5. Exit

Enter choice
1

ID	NAME	ADDRESS	PHONE_NO
1	amey	pune	9832456824
3	rahul	nashik	9867342105

ADDRESS BOOK
1. View
2. Insert
3. Delete
4. Modify
5. Exit

Enter choice
4

Enter ID to modify
3
Enter name
rahul
Enter address
mumbai
Enter phone_no
9783219842

ADDRESS BOOK
1. View
2. Insert
3. Delete
4. Modify
5. Exit

Enter choice
1

```
ID    NAME      ADDRESS      PHONE_NO
1     amey      pune         9832456824
3     rahul     mumbai       9783219842
```

ADDRESS BOOK
1. View
2. Insert
3. Delete
4. Modify
5. Exit

Enter choice
5

EXITING