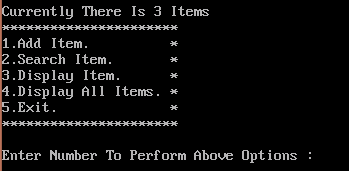
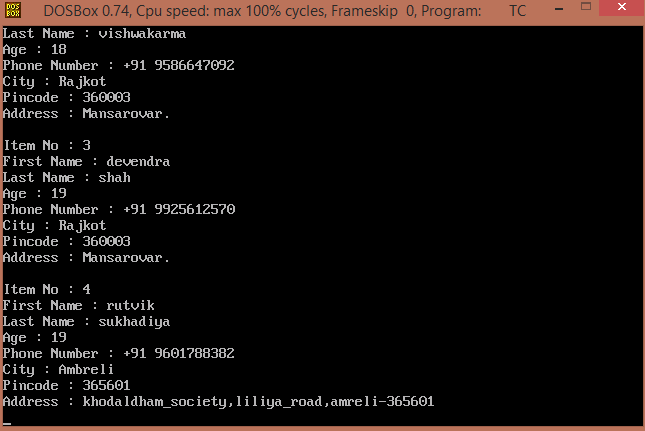
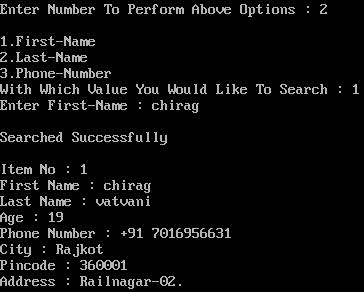
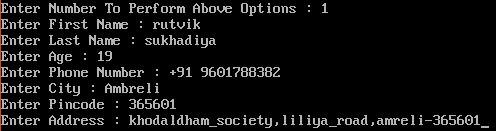
Data Structure Project (Address Book)

#include<stdio.h>  
#include<conio.h>  
#include<string.h>  
#include<stdlib.h>  
int i,count=0,c;  
FILE \*f1;  
struct AddressBook  
{  
 char fn[15];  
 char ln[15];  
 int age;  
 char phone[11];  
 char city[15];  
 char pincode[7];  
 char address[100];  
  
  
}a[50];  
void AddItem(int b)  
{  
 int j,k,y;  
  
 printf("Enter First Name : ");  
 scanf("%s",a[b].fn);  
 printf("Enter Last Name : ");  
 scanf("%s",a[b].ln);  
 printf("Enter Age : ");  
 scanf("%d",&a[b].age);  
 printf("Enter Phone Number : +91 ");  
 scanf("%s",a[b].phone);  
 z:  
 for(i=0;i<=count;i++)  
 {  
 for(j=i+1;j<=count;j++)  
 {  
 y=0;  
 for(k=0;k<strlen(a[i].phone);k++)  
 {  
 if(a[i].phone[k]==a[j].phone[k])  
 {  
 ++y;  
 }  
 }  
 if(y==strlen(a[i].phone))  
 {  
 printf("Same Number Cannot Be Used\n");  
 printf("Re - Enter the phone number: +91 ");  
 scanf("%s", &a[j].phone);  
 goto z;  
 }  
 }  
 }  
 printf("Enter City : ");  
 scanf("%s",a[b].city);  
 printf("Enter Pincode : ");  
 scanf("%s",a[b].pincode);  
 printf("Enter Address : ");  
 scanf("%s",a[b].address);  
 f1=fopen("data.txt","a");  
 fprintf(f1," %d\t%s\t\t%s\t\t%d\t%s\t%s\t%s\t%s\n",b+1,a[b].fn,a[b].ln,a[b].age,a[b].phone,a[b].city,a[b].pincode,a[b].address);  
 fclose(f1);  
 ++count;  
}  
void SearchItem(int b)  
{  
 int y=0,j,n,c1=0;  
 char number[11],fn1[15],ln1[15];  
 if(b==0)  
 {  
 printf("Not Even Single Data Is Present Then How You Will Search");  
 }  
 else  
 {  
 printf("\n1.First-Name");  
 printf("\n2.Last-Name");  
 printf("\n3.Phone-Number");  
 printf("\nWith Which Value You Would Like To Search : ");  
 scanf("%d",&n);  
 switch(n)  
 {  
 case 1:  
 printf("Enter First-Name : ");  
 scanf("%s",fn1);  
 for(i=0;i<count;i++)  
 {  
 y=0;  
 for(j=0;j<strlen(fn1);j++)  
 {  
 if(a[i].fn[j]==fn1[j])  
 {  
 ++y;  
 }  
 }  
 if(y==strlen(fn1))  
 {  
 ++c1;  
 printf("\nSearched Successfully\n");  
 printf("\nItem No : %d",i+1);  
 printf("\nFirst Name : %s",a[i].fn);  
 printf("\nLast Name : %s",a[i].ln);  
 printf("\nAge : %d",a[i].age);  
 printf("\nPhone Number : +91 %s",a[i].phone);  
 printf("\nCity : %s",a[i].city);  
 printf("\nPincode : %s",a[i].pincode);  
 printf("\nAddress : %s\n",a[i].address);  
  
 }  
 if(c1<=i&&i==count-1)  
 {  
 c1=0;  
 goto v;  
 }  
 }  
 if(y<strlen(fn1))  
 {  
 printf("\n!!!!! Matching Not Found !!!!!\n");  
 }  
 v:  
 break;  
 case 2:  
 printf("Enter Last-Name : ");  
 scanf("%s",ln1);  
 for(i=0;i<count;i++)  
 {  
 y=0;  
 for(j=0;j<strlen(ln1);j++)  
 {  
 if(a[i].ln[j]==ln1[j])  
 {  
 ++y;  
 }  
 }  
 if(y==strlen(ln1))  
 {  
 ++c1;  
 printf("\nSearched Successfully\n");  
 printf("\nItem No : %d",i+1);  
 printf("\nFirst Name : %s",a[i].fn);  
 printf("\nLast Name : %s",a[i].ln);  
 printf("\nAge : %d",a[i].age);  
 printf("\nPhone Number : +91 %s",a[i].phone);  
 printf("\nCity : %s",a[i].city);  
 printf("\nPincode : %s",a[i].pincode);  
 printf("\nAddress : %s\n",a[i].address);  
 }  
 if(c1<=i&&i==count-1)  
 {  
 c1=0;  
 goto r;  
 }  
 }  
 if(y<strlen(ln1))  
 {  
 printf("\n!!!!! Matching Not Found !!!!!\n");  
 }  
 r:  
 break;  
 case 3:  
 printf("Enter Phone-Number : ");  
 scanf("%s",number);  
 for(i=0;i<count;i++)  
 {  
 y=0;  
 for(j=0;j<strlen(number);j++)  
 {  
 if(a[i].phone[j]==number[j])  
 {  
 ++y;  
 }  
 }  
 if(y==strlen(number))  
 {  
 ++c1;  
 printf("\nItem No : %d",i+1);  
 printf("\nFirst Name : %s",a[i].fn);  
 printf("\nLast Name : %s",a[i].ln);  
 printf("\nAge : %d",a[i].age);  
 printf("\nPhone Number : +91 %s",a[i].phone);  
 printf("\nCity : %s",a[i].city);  
 printf("\nPincode : %s",a[i].pincode);  
 printf("\nAddress : %s\n",a[i].address);  
 }  
 if(c1<=i&&i==count-1)  
 {  
 c1=0;  
 goto s;  
 }  
 }  
 if(y<strlen(number))  
 {  
 printf("\n!!!!! Matching Not Found !!!!!\n");  
 }  
 s:  
 break;  
 default:  
 printf("!!!! Invalid Choice !!!!");  
 }  
 }  
}  
void DisplayItem()  
{  
 int j;  
 printf("Which Data You Want To display : ");  
 scanf("%d",&j);  
 if(j>count||j==0)  
 {  
 printf("Data For %d Is Not available",j);  
 }  
 else  
 {  
 printf("\nItem No : %d",j);  
 --j;  
 printf("\nFirst Name : %s",a[j].fn);  
 printf("\nLast Name : %s",a[j].ln);  
 printf("\nAge : %d",a[j].age);  
 printf("\nPhone Number : +91 %s",a[j].phone);  
 printf("\nCity : %s",a[j].city);  
 printf("\nPincode : %s",a[j].pincode);  
 printf("\nAddress : %s\n",a[j].address);  
 }  
}  
void AllItem(int d)  
{  
 for(d=0;d<count;d++)  
 {  
 printf("\nItem No : %d",d+1);  
 printf("\nFirst Name : %s",a[d].fn);  
 printf("\nLast Name : %s",a[d].ln);  
 printf("\nAge : %d",a[d].age);  
 printf("\nPhone Number : +91 %s",a[d].phone);  
 printf("\nCity : %s",a[d].city);  
 printf("\nPincode : %s",a[d].pincode);  
 printf("\nAddress : %s\n",a[d].address);  
 }  
}  
main()  
{  
 while(1)  
 {  
 clrscr();  
 printf("\nCurrently There Is %d Items",count);  
 printf("\n\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");  
 printf("\n1.Add Item. \*");  
 printf("\n2.Search Item. \*");  
 printf("\n3.Display Item. \*");  
 printf("\n4.Display All Items. \*");  
 printf("\n5.Exit. \*");  
 printf("\n\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");  
 printf("\n\nEnter Number To Perform Above Options : ");  
 scanf("%d",&c);  
 switch(c)  
 {  
 case 1:  
 AddItem(count);  
 getch();  
 break;  
 case 2:  
 SearchItem(count);  
 getch();  
 break;  
 case 3:  
 DisplayItem();  
 getch();  
 break;  
 case 4:  
 AllItem(i);  
 getch();  
 break;  
 case 5:  
 printf("\nThanks For Using Address Book");  
 getch();  
 exit(0);  
 default:  
 printf("\nNo Options Were Available For Entered Number %d ",c);  
 }  
 }  
}

**OUTPUT:-**

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