**EXP: ARRAY IMPLEMENTATION OF LIST**

#include<stdio.h>

#include<conio.h>

#include<alloc.h>

int a[100];

int create(){

int n,i;

printf("\nHow many elements you want to insert?");

scanf("%d",&n);

for(i=0;i<n;i++) {

printf("\nEnter the element number %d:",i+1);

scanf("%d",&a[i]); }

printf("\nThe list is successfully created");

return(n); }

void reverse(int n) {

int i;

printf("\nThe list in reverse order is:");

for(i=n-1;i>=0;i--) {

printf("%d",a[i]); } }

int search(int n) {

int i,key;

printf("\nEnter the key value:");

scanf("%d",&key);

for(i=0;i<n;i++) {

if(a[i]==key) {

printf("The given number is at position %d",i+1);

return i; } }

printf("\nThe number is not in the list");

return 0;}

int insert(int n,int a[ ]) {

int i,key,pos;

printf("\nEnter the key value:");

scanf("%d",&key);

printf("\nEnter the position:");

scanf("%d",&pos);

for(i=n-1;i>=pos-1;i--) {

a[i+1]=a[i]; }

a[pos-1]=key;

n++;

return n; }

void display(int n) {

int i;

printf("\nThe list is:");

for(i=0;i<n;i++) {

printf("%d",a[i]); } }

int delet(int n,int a[]) {

int i,pos;

pos=search(n);

printf("\nThe element is deleted");

for(i=pos;i<n-1;i++) {

a[i]=a[i+1]; }

n--;

return n; }

void count(int n) {

int i,count=0;

for(i=0;i<n;i++) {

count++; }

printf("%d",count); }

void main() {

int choice,l;

clrscr();

printf("\n\*\*\*\*Array implementation of ordered list\*\*\*\*");

do {

printf("\n 1.Create 2.Insert 3.Display 4.Reverse 5.Search 6.Delete 7.Count 8.Exit");

printf("\nEnter the option:");

scanf("%d",&choice);

switch(choice) {

case 1:

l=create();

break;

case 2:

l=insert(l,a);

break;

case 3:

display(l);

break;

case 4:

reverse(l);

break;

case 5:

search(l);

break;

case 6:

l=delet(l,a);

break;

case 7:

count(l);

break;

case 8:

exit(0);} }

while(choice<7);

getch(); }