#include<stdio.h>

#define SIZE 10

int a[SIZE],pos=-1;

void insert()

{

if(pos==SIZE-1)

{

printf("Array is full\n");

}

else

{

printf("Enter element to be inserted\n");

pos++;

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

}

}

void delete()

{

if(pos==-1)

{

printf("Array is empty\n");

}

else

{

int p,i;

printf("\nEnter position to be deleted\n");

scanf("%d",&p);

if((p>pos)||(p<0))

{

printf("Wrong position\n");

}

else

{

for(i=p;i<pos;i++)

{

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

}

pos--;

printf("Deleted successfully\n");

}

}

}

void display()

{

int i;

printf("\nThe elements are\n");

for(i=0;i<=pos;i++)

{

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

}

printf("\n");

}

void sort()

{

int i,j,temp;

for(i=0;i<pos;i++)

{

for(j=i+1;j<=pos;j++)

{

if(a[i]>a[j])

{

temp=a[i];

a[i]=a[j];

a[j]=temp;

}

}

}

display();

}

void search()

{

int flag=0,num,i;

printf("Enter element to be search\n");

scanf("%d",&num);

for(i=0;i<=pos;i++)

{

if(num==a[i])

{

flag=1;

printf("Element found at position : %d\n",i);

break;

}

}

if(flag==0)

{

printf("Element not found\n");

}

}

int menu()

{

int ch;

printf("\n1.Insert\n2.Delete\n3.Sort\n4.Display\n5.Search\n6.Exit\nEnter your choice : ");

scanf("%d",&ch);

return ch;

}

void main()

{

int ch;

for(ch = menu(); ch!=6 ;ch=menu())

{

switch(ch)

{

case 1:

insert();

break;

case 2:

delete();

break;

case 3:

sort();

break;

case 4:

display();

break;

case 5:

search();

break;

default:

printf("Wrong choice\n");

break;

}

}

}