**Aim:**

To perform a linear search on an 1 D Array according to the user choice.

**Source Code:**

#include<iostream.h>

#include<stdio.h>

#include<conio.h>

#include<string.h>

void main()

{

clrscr();

int ch, arr[10], large=0, small=0,num;

char flag='n';

cout<<"\n1.Linear search"

<<"\n2.Find largest in a integer array"

<<"\n3.Find smallest in a integer array"

<<"\nEnter array ";

for(int j=0;j<10;j++)

cin>>arr[j];

cout<<"Enter choice ";

cin>>ch;

if(ch==1)

{

cout<<"Enter number to be searched ";

cin>>num;

for(int i=0;arr[i]!='\0';i++)

{

if(num==arr[i])

{

flag='y';

break;

}

}

if(flag=='y')

cout<<"Number found at "<<i+1<<" position";

else

cout<<"Number not found";

getch();

}

else if(ch==2)

{

large=arr[0];

for(int i=0;i<11;i++)

{

if(arr[i]>large)

large=arr[i];

}

cout<<"Largest integer in the array is "<<large;

getch();

}

else if(ch==3)

{

small=arr[0];

for(int i=0;i<11;i++)

{

if(arr[i]<small)

small=arr[i];

}

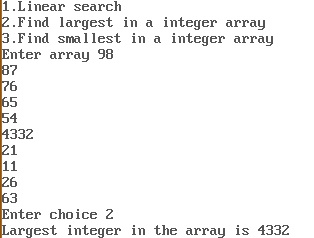
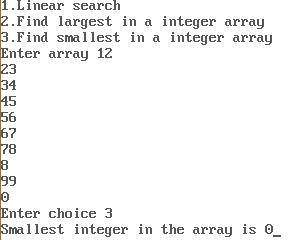
cout<<"Largest integer in the array is "<<small;

getch();

}getch();

}

**Output :**

** **