#include <time.h>

#include <iostream>

#include<algorithm>

using namespace std;

const int length=999;

int n;

//lienaer searching or Sequential Searches

int linearsearch(int ra[length],int searchingvalue) //called function

{

for(int i=1;i<=n;i++)

{

if(searchingvalue==ra[i]) //array must not be sorted

{

return i; //return index

}

}

return -1;

}

//////////////////////////////////////

int main()

{

int a[length];

int uservalue;

cout<<"Enter the value of last index";

cin>>n;

for (int i=1; i<=n; i++) {

/\* pick random number from 1 to 1000 and output it \*/

a[i]=(rand() % 1000);

cout<<a[i];

cout<<endl;

} /\* end for \*/

/\* indicates successful termination \*/

cout<<"\nEnter the searching value=";

cin>>uservalue;

clock\_t start = clock();

int result=linearsearch(a,uservalue); //passing array calling

if(result>=0)

{

cout<<"\n\nThe no="<<a[result]<<"was found at the element with index ="<<result<<endl;

}

else

{

cout<<"Number was not found"<<endl;

}

clock\_t stop = clock();

double elapsed = (double)(stop - start) \* 1000.0 / CLOCKS\_PER\_SEC;

cout<<"Time elapsed in ms: "<<elapsed;

getchar();

getchar();

return(0);

}