**//Sequential Search or linear search**

#include<iostream>

using namespace std;

int main()

{

int a[5],i;

int n,loc=-1;

cout<<"Enter 5 values:";

for(i=0;i<5;i++)

{

cin>>a[i];

}

cout<<"Enter value to find";

cin>>n;

for(i=0;i<5;i++)

{

if(a[i]==n)

loc=i;

}

if(loc==-1)

cout<<"Value not found";

else

cout<<"Value found at :"<<loc;

getchar();

getchar();

}

**//Binary Search**

#include<iostream>

using namespace std;

int main()

{

int a[5],i;

int n,loc=-1;

int m,s,e;

s=0;

e=4;

cout<<"Enter 5 values in assending order:";

for(i=0;i<5;i++)

{

cin>>a[i];

}

cout<<"Enter value to find:";

cin>>n;

while(s<=e)

{

int m=(s+e)/2;

if(a[m]==n)

{

loc=m; //binary is more efficient because it find more then 10 values

break;

}

else if(n<a[m])

e=m-1; //move left

else

s=m+1; //move right mid+1

}

if(loc==-1)

cout<<"Value not found";

else

cout<<"Value found at :"<<loc;

getchar();

getchar();

return 0;

}