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**Roll No. – 127**

**Assignment no. – 2.2**

**Title – Implementation of program based on Bubble Sort(using array).**

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#include<iostream.h>

#include<conio.h>

int BINARY\_SEARCH(int \*A,int size,int search)

{

int low = 1, high = size;

while(low<=high)

{

int mid = (low+high)/2;

if(A[mid]==search)

{

return mid;

}

else

{

if(search<A[mid])

{

high = mid - 1;

}

else

{

low = mid + 1;

}

}

}

return 0;

}

void main()

{

clrscr();

int \*A,size,search;

cout<<"Enter the size of array: ";

cin>>size;

A = new int[size+1];

cout<<"Enter "<<size<<" numbers in the array: "<<endl;

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

{

cin>>A[i];

}

cout<<"Which number do you want to search: ";

cin>>search;

//calling the BINARY\_SEARCH() function

int res = BINARY\_SEARCH(A,size,search);

if(res>=1)

{

cout<<"The number "<<search<<" is found at position "<<res<<endl;

}

else

{

cout<<"The number "<<search<<" is not found.";

}

getch();

}