

Midterm Written Examination.  
18/5/2021

Time all: 30 Min.  
A



Answer the following questions

1	2	3	4	5	6	7	8	9	10	11	12	13
a	b	a	a	b	c	d	a	a	a	c	d	a

Write C++ program to ask the user to enter array {1,5,13,4,25} from keyboard then ask the user to enter the required number to search it {13} using jump search technique

```
#include <iostream>
#include <cmath>
using namespace std;
int jumpsearch(int[],int,int);
int main(int argc, char *argv[])
{
    int arr[]={5};
    int x=;
    int n=sizeof(arr)/sizeof(arr[0]);
    for(int i=0;i<5;i++)
        cin>>arr[i];
    cin>>x;
    int index=jumpsearch(arr,n,x);
    cout<<"item index is : "<<index<<endl;
    return 0;
}
int jumpsearch(int arr[],int n,int x)
{
    int l=0, r=sqrt(n), m=sqrt(n);
    while(arr[r]<=x && r<n)
    {
        l=r;
        r=r+m;
        if (r>n-1)
            r=n;}
    for (int i=l;i<r; i++)
        if (arr[i]==x)
            return i;
    return -1;}
```