```
File Edit Format View Help
                                  r = mid - 1:
          couter"Not present "ecounterend!
          return count,
nt main()
         int test_case,array_size,key;
         coutee Input Number of test cases evend!;
         cin>test_case;
         int count = 0 :
        for(int i = 0; i < test\_case; i \leftrightarrow)
                   cins array_size:
                   int array[array_size]
                   for(int j = 0.j carray_size : j ++)
                             cin» array[j]:
                  cout<<"Input element to search"<<endl;
                  cino key:
                  int 1 = 0.
                  int r = array_size;
                 ExponentialSearch(array,array_size,key):
      return O
```

```
#include(iostream)
using namespace std;
int Iterative_BinarySearch(int array[], int I ,int r,int key, int count);
int ExponentialSearch(int array[], int array_size,int key)
          int count = 1:
          if(array[0] == key)
                     cout« "Present" « count « end!
                    return count.
          int i = 1:
         while(i < array_size && array[i] <= key)
                    1=1 . 2:
                    count = count + 1:
         return Iterative_BinarySearch(array, int(i/2), min(i,array_size -1), key,count);
int Iterative_BinarySearch(int array[], int I int r int key,int count)
         while (1 = r)
                   int mid = 1 . (r-1)/2;
                   count = count + 1;
                   if(array[mid] == key)
                             couter"present "eccounterend!
                             return count,
      D Type here to search
```

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```
File Edit Format View Help
#includeciastream>
using namespace std:
int Iterative_BinarySearch(int array[], int I ,int r,int key)
           int count = 0:
           while (1 <= r)
                      int mid = 1 + (r-1)/2;
                      count = count + 1:
                      if(array[mid] == key)
                                 coutes Present "ecounterendl;
                                 return count:
                     else if (array[mid] < key)
                                1 = mid +1:
                     else
                               r = mid - 1:
          couter "Not present "ercounterend!;
          return count;
int main()
          int test_case,array_size,key;
          couter Input Number of test cases "eendl;
          Type here to search
```

iterative binary search - Notepad

```
#includeriostream>
#include bits/stdc++ h>
using namespace std;
int JumpSearch(int array[], int array_size,int key)
           int step = sqrt(array_size):
           int prev = 0, count = 0;
          while (array[min(step,array_size)-1] < key)
                     count = count +1;
                     prev = step;
                     step = step + sqrt(array_size);
                     if(prev >= array_size)
                               couter*Not present *eendl;
                               return count.
          while(array[prev] < key)
                    prev = prev + 1;
                    if (prev == min(step,orray_size))
                              couter"Not present "eccounterendl;
                              return count.
                    count = count + 1:
          if (array[prev] == key)
           Type here to search
                                                   0
```

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```
#includeciostream>
Using namespace std;
int main(){
    int n;
    sin>>n;
    int acrini;
    for(int i-0;i<n;i++){
         sin>>acr[i];
    cout << "Enter the number you want to find..";
     int temp;
     cin>>temp;
     bool is found = false;
     for(int 1-0; i<n; i++){
         if(acc[1] -- temp)[
             isfound = true;
             break;
     if(isEgund)
         coutes"The number is present in the array\n";
     else
         costcc"The number is not present in the array\n";
     return 0;
```

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```
else
                                 r = mid - 1
           cout«"Not present "«count«end!;
           return count:
int main()
          int test_case,array_size,key:
          cout<<"Input Number of test cases"<<endl;
          cin>test_case;
          int count = 0 :
          for(int i = 0; i < test_case; i++)
                    cin> array_size;
                    int array[array_size]:
                    for(int j = 0; j carray_size : j++)
                              cin>> array[j]
                    coutee*Input element to search*eendl;
                    cin>> key:
                    int 1 = 0:
                    int r = array_size;
                    Iterative_BinarySearch(array.l.r-1.key);
          return 0:
       D Type here to search
```

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