

Experiment - 1.1

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Subject Name : Advance Programming Lab

Subject Code: 20CSV-334_20AML-4

1.Aim/Overview of the Practical

Write a Program in C++ to find the Kth smallest/largest element in an array using template and C++ STL.

2.Task to be done

- a. Take input from the user and store the element in an array.
- b. Write a program to find the kth smallest element in the array.

3. Program Code:

```
#include<bits/stdc++.h>
using namespace std;

template<typename T>
T ksmallestelement(T arr[],int k)
{
    set<T>s;
    int size = sizeof(arr)/sizeof(arr[0]);

    for(int i=0;i<size;i++)
    {
        s.insert(arr[i]);
    }
}
```

```

auto it = s.begin();

for(int i=0;i<k;i++)
it++;

return *it;

}

int main()
{
vector<float> f = {1.1,0.1,4.5,6.8};
vector<int> i = {1,2,3,3,4,2,1,1,1,-1};

float f1[] = {1.1,0.1,4.5,6.8};
int i1[] = {1,2,3,3,4,2,1,1,1,-1};

int arr[] =
{11,1,1,1,1,232,2,2,2,1,1,2,32,1,2,3,1,1231,1,2,3,1,2,41,3,3,
2,12,3,2,1,23,2,32};

//

cout<<"The Kth Smallest Element :
"<<ksmallestelement(arr,2)<<endl;
return 0;
}

```

4. Output:



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