

STL (in C++)

Algo Workshop Day 2

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1. STL Functions

(inbuilt Algorithms in C++)

(a) 1D array

Predefined functions/algorithms for 1D array

Code:

<https://github.com/shubham-up-47/STL-Algo-Session/tree/main/STL%20Functions>

Practise: <https://www.hackerrank.com/domains/data-structures?filters%5Bsubdomains%5D%5B%5D=arrays>

(b) 2D array

Predefined functions/algorithms for 2D array

Code:

<https://github.com/shubham-up-47/STL-Algo-Session/tree/main/STL%20Functions>

Practise: <https://www.hackerrank.com/domains/data-structures?filters%5Bsubdomains%5D%5B%5D=arrays>

(c) Numbers

Predefined functions/algorithms for numbers

Code:

<https://github.com/shubham-up-47/STL-Algo-Session/tree/main/STL%20Functions>

Practise:

<https://www.hackerrank.com/domains/algorithms?filters%5Bsubdomains%5D%5B%5D=warmup&filters%5Bdifficulty%5D%5B%5D=easy>

2. STL Containers

(inbuilt Data Structures in C++)

(a) String

Defining string 's': `string s;`

Code:

<https://github.com/shubham-up-47/STL-Algo-Session/tree/main/STL%20Containers>

Practise:

https://www.hackerrank.com/domains/algorithms?filters%5Bsubdomains%5D%5B%5D=strings&filters%5Bdifficulty%5D%5B%5D=easy&badge_type=problem-solving

(b) Vector

Defining vector 'v': `vector<int> v;`

Code:

<https://github.com/shubham-up-47/STL-Algo-Session/tree/main/STL%20Containers>

Practise: <https://www.hackerrank.com/domains/data-structures?filters%5Bsubdomains%5D%5B%5D=arrays&filters%5Bdifficulty%5D%5B%5D=easy>

(c) Stack

Defining stack's: `stack<int> s;`

Code:

<https://github.com/shubham-up-47/STL-Algo-Session/tree/main/STL%20Containers>

Practise: <https://www.hackerrank.com/domains/data-structures?filters%5Bsubdomains%5D%5B%5D=stacks&filters%5Bdifficulty%5D%5B%5D=easy>

(d) Queue

Defining queue 'q': `queue<int> q;`

Code:

<https://github.com/shubham-up-47/STL-Algo-Session/tree/main/STL%20Containers>

Practise: <https://www.hackerrank.com/domains/data-structures?filters%5Bsubdomains%5D%5B%5D=queues>

(e) Max Priority Queue

Defining max priority queue 'p': `priority_queue<int> p;`

Code:

<https://github.com/shubham-up-47/STL-Algo-Session/tree/main/STL%20Containers>

Practise: <https://www.hackerrank.com/domains/data-structures?filters%5Bsubdomains%5D%5B%5D=heap&filters%5Bdifficulty%5D%5B%5D=easy>

(f) Min Priority Queue

Defining min priority queue 'p':

```
priority_queue<int,vector<int>,greater<int>> p;
```

Code:

<https://github.com/shubham-up-47/STL-Algo-Session/tree/main/STL%20Containers>

Practise: <https://www.hackerrank.com/domains/data-structures?filters%5Bsubdomains%5D%5B%5D=heap&filters%5Bdifficulty%5D%5B%5D=easy>

(g) Unordered Set

Defining unordered set 's': `unordered_set<int> s;`

Code:

<https://github.com/shubham-up-47/STL-Algo-Session/tree/main/STL%20Containers>

Practise:

https://www.hackerrank.com/domains/cpp?filters%5Bsubdomains%5D%5B%5D=stl&badge_type=cpp

(h) Unordered Map

Defining unordered map 'h': `unordered_map<string,int> h;`

Code:

<https://github.com/shubham-up-47/STL-Algo-Session/tree/main/STL%20Containers>

Practise:

https://www.hackerrank.com/domains/cpp?filters%5Bsubdomains%5D%5B%5D=stl&badge_type=cpp

3. STL Iterators

(inbuilt iterators in C++)

Iterating on containers

Defining iterator 'it' for container X: X::iterator it;

Code:

<https://github.com/shubham-up-47/STL-Algo-Session/tree/main/STL%20Iterators>

Practise:

https://www.hackerrank.com/domains/cpp?filters%5Bsubdomains%5D%5B%5D=stl&badge_type=cpp

Thank You