

Sr. No. of Event / Activity	Day/Date	Year	Month	Time	Venue	Description of Activity
1.	30/Sunday	2021	5	4:00 pm to 7:00 pm	Online on Google Meet	STL Workshop

Details of participation in the event/activity
(Fill wherever is applicable or information is available. At least total need to fill)

No of students / faculty	COMP	ETRX	EXTC	IT	MECH	Total no of participants
Day1	-	-	-	-	-	21
Day2						

Report of event/ activity

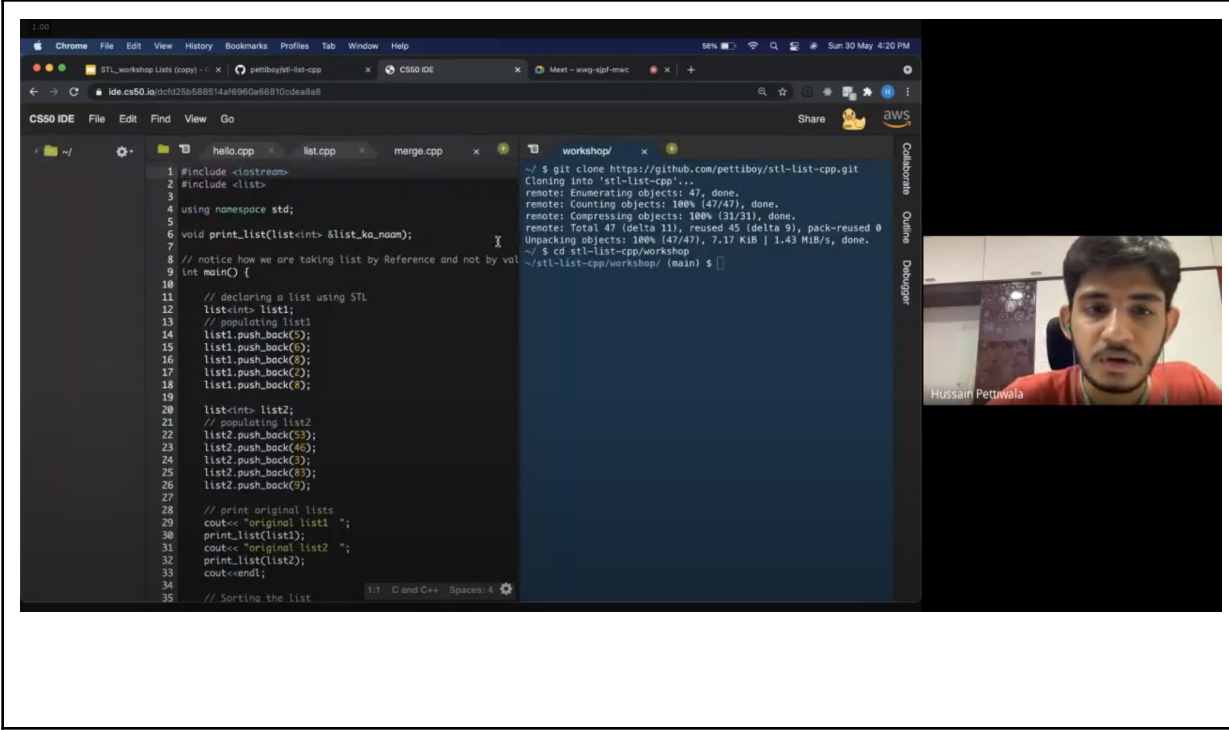
Event: STL Workshop

Competitive programming(CP) is a major aspect of judging during placements as it builds the basics of programming knowledge and logical reasoning which every programmer must have. One of the most widely used tools by top competitive programmers is the STL (Standard Template Library) of C++. CodeCell organised a session to present the powerful STL so that everyone may learn how to utilise it effectively and level up their competitive programming game.

All the extensively used data structures were covered including arrays, vectors, maps, queues, etc. The team went through the importance of these data structures, how they help to optimize the code and how to gain the intuition to know which one to employ in which case in great depth. The audience had a clear and detailed understanding of all the topics; thanks to the well-organized powerpoint presentation. Hands-on experience of the various functions offered in STL related to each data structure was also offered, allowing everyone to clear their doubts and gain confidence in using STL. Following the end of each topic, everyone was given a problem statement to complete in order to assess their comprehension.

All of the participants were given access to the presentation files as well as all of the other materials utilised during the session so that they may refer to them afterward.

Sample Photographs of the Event/Activity



CS50 Sandbox

```

10
11 vector<int> v;
12 vector<int>::iterator i;
13
14 v.push_back(20);
15 v.push_back(30);
16 v.push_back(13);
17 v.push_back(14);
18 v.pop_back();
19
20 for(i = v.begin(); i != v.end(); ++i){
21     cout<<i<<"\n";
22 }
23
24 return 0;
25
26
27 }

```

```

$ make demo && ./demo
g++ demo.cpp -lcrypt -lcs50 -lm -o demo
Hello world
$

```

Terminal

Jay Malve

meet.google.com is sharing your screen.

```

8 int main()
9 {
10     stack<int> myStack;
11
12     for(int i=1; i<6; i++)
13     {
14         myStack.push(i);
15     }
16
17     cout<<"Size:"<<myStack.size()<<endl;
18
19     while(!myStack.empty())
20     {
21         cout<<"element: "<<myStack.top()<<endl;
22         myStack.pop();
23     }
24 }

```

```

[Running] cd "c:\Users\Tanvi\Desktop\PP1" && g++ Stack_swap.cpp -o Stack_swap && "c:\Users\Tanvi\Desktop\PP1\Stack_swap
mystack1 = 9 7 6 5 4
mystack2 = 4 3 2 1
[Done] exited with code=0 in 1.685 seconds

[Running] cd "c:\Users\Tanvi\Desktop\PP1" && g++ Stack_swap.cpp -o Stack_swap && "c:\Users\Tanvi\Desktop\PP1\Stack_swap
mystack1 = 9 7 5 3
mystack2 = 4 3 2 1
[Done] exited with code=0 in 0.857 seconds

```

TANVI DESHPANDE

The code:

```

#include <iostream>
#include <string>
#include <map>

using namespace std;
int main() {

    map<int, string> Students;

    Students.insert(std::pair<int, string>(190789, "Akash"));
    Students.insert(std::pair<int, string>(190790, "Manas"));
    Students.insert(std::pair<int, string>(190791, "Tanveer"));
    Students.insert(std::pair<int, string>(190792, "Zenil"));

    cout << "Map size is: " << Students.size() << endl;
    cout << endl << "Default map Order is: " << endl;

    for (map<int, string>::iterator it = Students.begin(); it !=
    Students.end(); ++it) {

        cout << (*it).first << ": " << (*it).second << endl;
    }
}

```



Medhavi Sinha

