X

Click to register for Certification exam (https://examform.nptel.ac.in/2025_01/exam_form/dashboard)

If already registered, click to check your payment status

Week 9: Assignment 9

The due date for submitting this assignment has passed.

Due on 2025-03-26, 23:59 IST.

As per our records you have not submitted this assignment.

1) Which of the following is an associative container in STL? ***1 point***

- vector
- deque
- set
- list

No, the answer is incorrect.

Score: 0

Accepted Answers:
set

2) Which of the following containers allows bidirectional iterators in STL? ***1 point***

- vector
- deque
- set
- array

No, the answer is incorrect.
Score: 0

Accepted Answers:
set

3) In a C++ program to: ***1 point***

- Create a vector<int> containing the elements 5, 15, 10, 20, 25.
- Use std::max element() to find the maximum element.
- Print the maximum element.

What is the output of the program?

- 25
- 20
- Compilation error
- Undefined behavior

No, the answer is incorrect.
Score: 0

Accepted Answers:
25

4) Which of the following is a non-modifying algorithm in STL? ***1 point***

- std::sort()

- std::copy()
- std::find()
- std::remove()

No, the answer is incorrect.
Score: 0
Accepted Answers:
std::find()

5) In a C++ program to: ***1 point***

- Create a vector<int> containing 50, 10, 40, 30, 20.
- Sort the vector in ascending order using std::sort().
- Print the sorted elements.

What is the correct sequence of output?

- 10 20 30 40 50
- 50 40 30 20 10
- Compilation error
- Undefined behavior

No, the answer is incorrect.
Score: 0
Accepted Answers:
10 20 30 40 50

6) In a C++ program that: ***1 point***

- Creates a map<string, int> to store student names and their marks.
- Adds the entries Alice: 90, Bob: 85, Charlie: 95.
- Prints all entries using an iterator.

What is the correct output?

- Alice: 90, Bob: 85, Charlie: 95
- Bob: 85, Charlie: 95, Alice: 90
- Compilation error

- Undefined behavior

No, the answer is incorrect.
Score: 0

Accepted Answers:
Alice: 90, Bob: 85, Charlie: 95

7) In a program to: ***1 point***

- Create a set<int> containing the elements 50, 10, 30, 20, 40.
- Use an iterator to traverse the set and print the elements.
- Use std::find() to check if 30 exists in the set.

Which of the following is true?

- The output is sorted in ascending order, and 30 is found.
- The output is sorted in descending order, and 30 is not found.
- The elements are printed in the order they were added.
- Compilation error.

No, the answer is incorrect.
Score: 0

Accepted Answers:
The output is sorted in ascending order, and 30 is found.

8) Which of the following operations is not directly supported by the std::list container in C++ (which implements a doubly linked list)? ***1 point***

- Insertion of elements at the front of the list
- Insertion of elements at the back of the list
- Direct access to elements by index
- Removal of elements from the front of the list

No, the answer is incorrect.
Score: 0

Accepted Answers:
Direct access to elements by index

9) Consider the following C++ code snippet. What will be the output? ***1 point***

```
#include <iostream>
#include <vector>

int main() {
    std::vector<int> vec = {1, 2, 3, 4, 5};
    std::vector<int>::iterator it = vec.begin();
    std::advance(it, 2);
    *it = 10;
    for (auto i = vec.begin(); i != vec.end(); ++i) {
        std::cout << *i << " ";
    }
    return 0;
}
```

- 1 2 3 4 5
- 1 2 10 4 5
- 1 2 3 10 5
- 1 2 3 4 10

No, the answer is incorrect.
Score: 0

Accepted Answers:
1 2 10 4 5

10) What will be the output of the following C++ program? ***1 point***

```
#include <iostream>
#include <deque>
using namespace std;

int main() {
    deque<int> dq;
    dq.push_back(10);
    dq.push_front(20);
    dq.push_back(30);
    dq.push_front(40);

    dq.pop_back();
    dq.pop_front();

    for (int x : dq) {
        cout << x << " ";
    }
    return 0;
}
```

- 10 30
- 20 10
- 20 30
- 10 20

No, the answer is incorrect.
Score: 0

Accepted Answers:
20 10