

Assignment - 11rd - 10

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Performance Date:

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Submission Date:

Problem Statement:

Write C++ program to insert, display, sort, search using STL.

Theory:

STL:

Standard Template Library (STL) is a set of C++ template class to provide common programming data structure & functions such as lists, stack, arrays, etc. It is a library of containers, algorithms & iterators.

1. Containers:-

Container & its classes store objects & data. There are 7 standard "first class" container classes & 3 container adopted classes.

2. Functions:

STL includes classes that overload function call operation. Instances of each class are called function objects.

Algorithms:

1. Give a header file to use vector.
2. Create vector <item> obj.
3. Create class item which contains all the req. variables.
4. Define functions globally to insert, print, search, sort.
5. Take input from user for req. operation.
6. Display after performance.

Test Case:

	Input	Exp O/P	Actual O/P	Result
1.	1. Name: abc quantity: 2 cost: 300 code: 200	-	-	Pass
2.	1. Name: xyz quantity: -1	Invalid input	Enter positive value	Pass
3.	1. Name: Abc cost: -1	Invalid input	Invalid input	Pass
4.	1. Name: abc cost: a	Invalid input	Invalid input	Pass
5.	2. Display all	Display all	Display all	Pass
6.	3. Search code: 200	Display	Display	Pass
7.	3. search code: 201	Does not exist	Does not exist	Pass
8.	4. Sort on Cost	Sorted	Sorted	Pass
9.	5. Exit	Thank You	Thank You	Pass
10.	3. Search code: abc	Invalid input	Invalid input	Pass