Text

Description automatically generated

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// Demo: 5:05 pm

#include <algorithm>

#include <iostream>

#include <numeric> //for accumulator operations

#include <vector>

using namespace std;

int main() { // an array of doubles

//cout << "Hello, your computer has virus :D" << endl;

double arr[] = {1.1, 2.2, 3.3, 2.2, 4.4};

// Determine the array size

int arr\_len = sizeof(arr) / sizeof(arr[0]);

// initialize vector v1 to array arr

vector<double> v1(arr, arr + arr\_len);

// Display the contents of vector v1

for (double content : v1) {

cout << content << " ";

}

cout << endl;

// Sorting the Vector in Ascending order

sort(v1.begin(), v1.end());

// Display the content of vector v1 after sorting

for (double content : v1) {

cout << content << " ";

}

cout << endl;

// Reversing the Vector v1

reverse(v1.begin(), v1.end());

// Display the content of vector v1

for (double content : v1) {

cout << content << " ";

}

cout << endl;

// Display the maximum element of vector v1

cout << \*max\_element(v1.begin(), v1.end()) << endl;

// Display the minimum element of vector v1

cout << \*min\_element(v1.begin(), v1.end()) << endl;

// Display the accumulation of all elements in vector v1

// Starting the summation from 0

cout << "Accumulation of all elements: "

<< accumulate(v1.begin(), v1.end(), 0.0) << endl;

// Counts the occurrences of 2.2 from 1st to last element

// Display the counts

cout << "Occurrences of 2.2 in the vector: "

<< count(v1.begin(), v1.end(), 2.2) << endl;

// Delete second element of vector

v1.erase(v1.begin() + 1);

// Display the v1 after erasing the element

for (double content : v1) {

cout << content << " ";

}

cout << endl;

return 0;

}