**SOLUTION 9**

#include <iostream>

#include <vector>

#include <algorithm>

using namespace std;

int maxdif(const vector<int>& arr) {

if (arr.size() < 2) {

cerr << " array must contain at least two elements." << endl;

return -1;

}

int maxElement = \*max\_element(arr.begin(), arr.end());

int minElement = \*min\_element(arr.begin(), arr.end());

return maxElement - minElement;

}

int main() {

vector<int> arr;

int n, element;

cout << "Enter the size of array ";

cin >> n;

cout << "Enter the elements";

for (int i=0;i<n;i++) {

cin >> element;

arr.push\_back(element);

}

int ans= maxdif(arr);

if (ans!=-1) {

cout << "The maximum difference between any two elements in the array is "<<ans<<endl;

} }

