```cpp
//*********************************************************************
 //                                                                    *
 //     Assingment:     #20                                            *
 //                                                                    *
 //     File:           Homework_project_20.cpp                        *
 //                                                                    *
 //     Due Date:       Dec 09 2019                                    *
 //                                                                    *
 //     Author:         Urban Shocker                                  *
 //                                                                    *
 //     Course Name:    Programming I                                  *
 //                                                                    *
 //     Course Number:  COSC 1550                                      *
 //                                                                    *
 //     Description:    This program                                   *
 //                                                                    *
 //                                                                    *
 //*********************************************************************
#include <iostream>
#include <string>
#include <iomanip>

using namespace std;

const int TESTNUM = 4;

//prototype

double getTests(double[], int);
double toTotalTest(double[], int);
double getAverage(double[], int);
double getHighest(double[], int);
double getLowest(double[], int);
void report(double[], int);

int main()
{

    double tests[TESTNUM];
    report(tests, TESTNUM);
}
//*************************************************************
//gets the input form the user
double getTests(double tests[], int size)
{

    for (int i = 0; i < size; i++)
    {
        cout << "Please enter the score for test number " << i+1 << endl;
```

```
50          cin >> tests[i];
51      }
52      return tests[TESTNUM];
53  }
54  //****************************************************************
55  //gets the total scores of all tests
56  double toTotalTest(double tests[],int size)
57  {
58      double total = 0;
59      for (int i = 0; i < size; i++)
60      {
61          total += tests[i];
62      }
63      return total;
64  }
65  //****************************************************************
66  //gets average of all tests
67  double getAverage(double tests[], int size)
68  {
69      double total = 0;
70      for (int i = 0; i < size; i++)
71      {
72          total += tests[i];
73      }
74      return total / size;
75  }
76  //****************************************************************
77  //gets the highest test score
78  double getHighest(double tests[], int size)
79  {
80      double highest = 0;
81      for (int i = 0; i < size; i++)
82      {
83          if (tests[i] > highest)
84          {
85              highest = tests[i];
86          }
87      }
88      return highest;
89  }
90  //****************************************************************
91  //gets the lowest test score
92  double getLowest(double tests[], int size)
93  {
94      double lowest = 0;
95      lowest = tests[0];
96      for (int i = 0; i < size; i++)
97      {
98          if (tests[i] < lowest)
```

```
 99          {
100              lowest = tests[i];
101          }
102      }
103      return lowest;
104  }
105  //*************************************************************
106  //reports the vlaues back to the user after calculations
107  void report(double tests[], int size)
108  {
109      cout << fixed << setprecision(2);
110      getTests(tests, size);
111      cout <<"The total is: " << toTotalTest(tests, size) << endl;
112      cout << "Please Enter to Continue";
113      cin.ignore();
114      cin.get();
115      cout <<"The average test score is: " << getAverage(tests, size) << endl;
116      cout << "Please Enter to Continue";
117      cin.get();
118      cout <<"The Highest Score is: " << getHighest(tests, size) << endl;
119      cout << "Please Enter to Continue";
120      cin.get();
121      cout <<"The Lowest test score is: " << getLowest(tests, size) << endl;
122      cout << "Please Enter to Continue";
123      cin.get();
124  }
125
126  /*
127  Please enter the score for test number 1
128  70
129  Please enter the score for test number 2
130  80
131  Please enter the score for test number 3
132  90
133  Please enter the score for test number 4
134  75
135  The total is: 315.00
136  Please Enter to Continue
137  The average test score is: 78.75
138  Please Enter to Continue
139  The Highest Score is: 90.00
140  Please Enter to Continue
141  The Lowest test score is: 70.00
142  Please Enter to Continue
143  */
```