```
1  //Programmer: Aaron Yoon
2  //Date: 9/28/22
3  //Project: calculate test scores
4  namespace Test_Score_Program
5  {
6      public partial class Form1 : Form
7      {
8          public Form1()
9          {
10             InitializeComponent();
11         }
12
13         private void Form1_Load(object sender, EventArgs e)
14         {
15
16         }
17
18         private void btnQUIT_Click(object sender, EventArgs e)
19         {
20             //quit the program
21             this.Close();
22         }
23
24         private void btnCalculate_Click(object sender, EventArgs e)
25         {
26             try
27             {
28                 //make the variables for each test score to make life
                     easier
29                 int testScore1 = int.Parse(txtTestOne.Text);
30                 int testScore2 = int.Parse(txtTestTwo.Text);
31                 double avgScore = (testScore1 + testScore2) / 2;
32                 string gradeCoef1 = null;
33                 string gradeCoef2 = null;
34                 string betterScore = null;
35
36                 //rounds to get the different of the letter grade
37                 int gradeFactor1 = testScore1 - round(testScore1);
38                 int gradeFactor2 = testScore2 - round(testScore2);
39                 string letterGrade1;
40                 string letterGrade2;
41
42                 //get the letter grade symbol for grade 1
43                 if (gradeFactor1 <= 3 && gradeFactor1 >= 0 && testScore1 !
                     = 100)
44                     gradeCoef1 = "-";
45                 else if (gradeFactor1 > 3 && gradeFactor1 < 7)
46                     gradeCoef1 = null;
47                 else if (gradeFactor1 >= 7 || testScore1 == 100)
```

```
48                      gradeCoef1 = "+";
49
50                  //get the letter grade symbol for grade 2
51                  if (gradeFactor2 <= 3 && gradeFactor1 >= 0 && testScore2 !
                      = 100)
52                      gradeCoef2 = "-";
53                  else if (gradeFactor2 > 3 && gradeFactor2 < 7)
54                      gradeCoef2 = null;
55                  else if (gradeFactor2 >= 7 || testScore2 == 100)
56                      gradeCoef2 = "+";
57
58
59                  //get the letter grade for grade 1
60                  if (testScore1 >= 90)
61                      letterGrade1 = "A";
62                  else if (testScore1 >= 80 && testScore1 < 90)
63                      letterGrade1 = "B";
64                  else if (testScore1 >= 70 && testScore1 < 80)
65                      letterGrade1 = "C";
66                  else if (testScore1 >= 60 && testScore1 < 70)
67                      letterGrade1 = "D";
68                  else
69                      letterGrade1 = "F";
70
71                  //get the letter grade for grade 2
72                  if (testScore2 >= 90)
73                      letterGrade2 = "A";
74                  else if (testScore2 >= 80 && testScore2 < 90)
75                      letterGrade2 = "B";
76                  else if (testScore2 >= 70 && testScore2 < 80)
77                      letterGrade2 = "C";
78                  else if (testScore2 >= 60 && testScore2 < 70)
79                      letterGrade2 = "D";
80                  else
81                      letterGrade2 = "F";
82
83
84                  if (testScore1 > testScore2)
85                      betterScore = "Test 1 scored higher than Test 2!";
86                  else if (testScore1 < testScore2)
87                      betterScore = "Test 2 scored higher than Test 1!";
88                  else if (testScore1 == testScore2)
89                      betterScore = "Both Tests scored the same!";
90
91
92                  //make the output label visible and put text in it
93                  lblOutput.Visible = true;
94                  lblOutput.Text = "Test Score 1: " + gradeCoef1 +
                      letterGrade1 + "\n"
```

```
 95                      + "Test Score 2: " + gradeCoef2 + letterGrade2 + "\n"
 96                      + betterScore + "\n"
 97                      + "Average Score is: " + avgScore;
 98              }
 99              catch
100              {
101                  MessageBox.Show("Please enter a valid test Score",
102                      "MISSING DATA!",
103                      MessageBoxButtons.OK,
104                      MessageBoxIcon.Warning
105                      );
106              }
107
108
109
110          }
111
112          private int round(double score)
113          {
114              //rounds the score to the nearest 2nd digit
115              int roundedScore = Convert.ToInt32(Math.Floor(score / 10));
116              return Math.Abs(roundedScore * 10);
117          }
118
119          private void btnCLEAR_Click(object sender, EventArgs e)
120          {
121              txtTestOne.Text = null;
122              txtTestTwo.Text = null;
123              lblOutput.Visible = false;
124          }
125      }
126  }
```