

VARUN KULKARNI (varun_kulkarni@compaid.com)

DEBUG PROJECT

ASSIGNMENT 1

Errors:

1) Value: {"Object reference not set to an instance of an object."}

Type: System.NullReferenceException

Resolution: Object should never be initialized as null. Given some instance.

```
StudentGrade grade = new StudentGrade (); // This is not null
```

2) Value: {"Object reference not set to an instance of an object."}

Type: System.NullReferenceException

Resolution: Object should never be initialized as null. Given some instance.

```
List<StudentGrade> gradeList = new List<StudentGrade> (); // This is not null
```

3) Value: {"Input string was not in a correct format."}

Type: System.FormatException

The value of maximum Points Possible for Rena is a string 'test'. It should have a numeric value of 100.

Resolution: Use of a try catch block

```
try
{
    grade.PointsPossible = int.Parse(row[2]);
}
catch
{
    System.Console.WriteLine("Failure in parsing" + row[2] + "to an
integer value of 100");
}
```

4) Value: {"Attempted to divide by zero."}

Type: System.DivideByZeroException

The value of maximum Points Possible for Adam is 0 which does not allow for calculation of average since division by 0 is not possible. It should have a numeric value of 100.

Resolution: Use of a try catch block

```
try
{
    this.Average = (this.PointsEarned / this.PointsPossible) * 100;
}
catch
{
    System.Console.WriteLine("Division by zero is not possible");
}
```

5) Value: {"Index was out of range. Must be non-negative and less than the size of the collection.\r\nParameter name: index"}

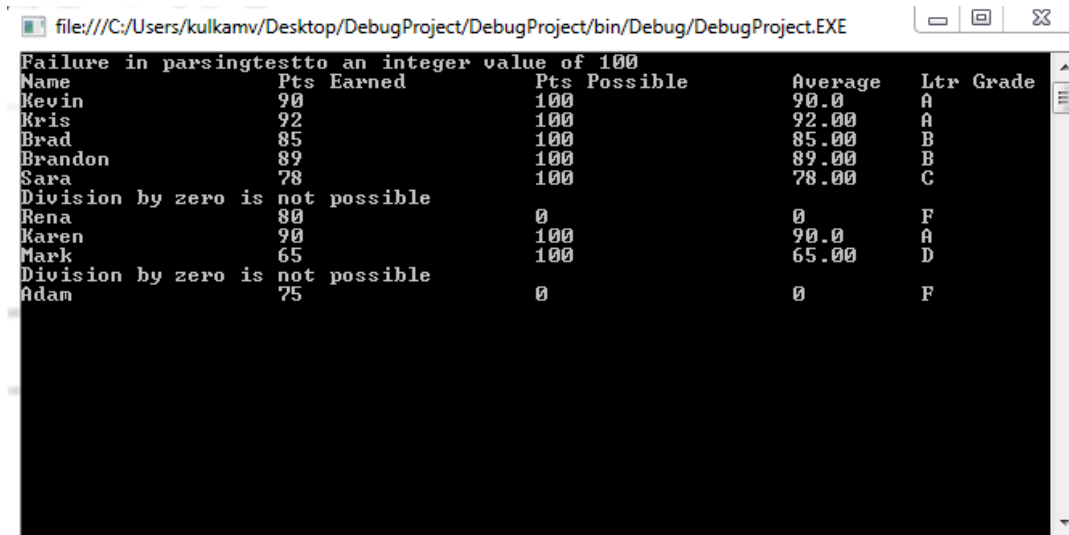
Type: System.ArgumentOutOfRangeException

Resolution: The equality <= is replaced by < to ensure that the range of index is maintained for the given conditions.

Note:

Errors have been corrected and the project has been debugged.

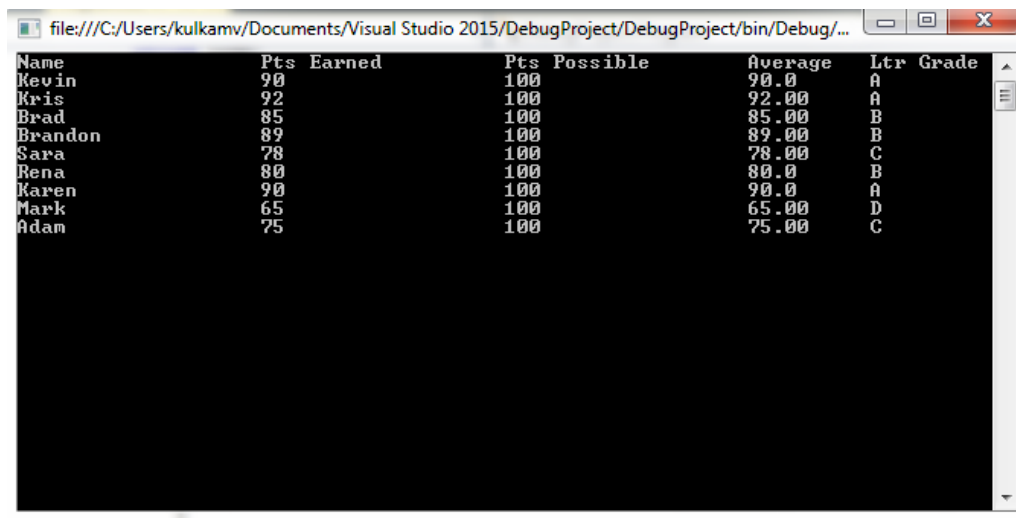
However, when I run the project, the output is correct but is not displayed properly.



The screenshot shows a Windows command prompt window with the title bar "file:///C:/Users/kulkamv/Desktop/DebugProject/DebugProject/bin/Debug/DebugProject.EXE". The output text is as follows:

```
Failure in parsing test to an integer value of 100
Name      Pts Earned      Pts Possible      Average      Ltr Grade
Kevin     90      100      90.00      A
Kris      92      100      92.00      A
Brad      85      100      85.00      B
Brandon   89      100      89.00      B
Sara      78      100      78.00      C
Division by zero is not possible
Rena      80      0      0      F
Karen     90      100      90.00      A
Mark      65      100      65.00      D
Division by zero is not possible
Adam      75      0      0      F
```

However, when I manually edit the text file for the exception errors handled by a try and catch block, Errors 3 and 4, the output display looks correct.



The screenshot shows a Windows command prompt window with the title bar "file:///C:/Users/kulkamv/Documents/Visual Studio 2015/DebugProject/DebugProject/bin/Debug/...". The output text is as follows:

```
Name      Pts Earned      Pts Possible      Average      Ltr Grade
Kevin     90      100      90.00      A
Kris      92      100      92.00      A
Brad      85      100      85.00      B
Brandon   89      100      89.00      B
Sara      78      100      78.00      C
Rena      80      100      80.00      B
Karen     90      100      90.00      A
Mark      65      100      65.00      D
Adam      75      100      75.00      C
```

Please advise on the following.