

Suppose, ABC University have decided that they will not take admission test for their undergraduate academic programs for the next semester. The students will be selected for admission based on their SSC and HSC GPA. They have stored all the applicants' data in a txt file called *student\_data.txt*. Now the Admission Committee wants some analysis to be performed on this data. These analyses include - finding the distinct combined GPAs (SSC + HSC GPA), finding the students' information holding that GPA, finding distinct SSC GPA and respective students and lastly finding distinct HSC GPA and respective students. The Committee also wants these information to be stored in separate txt files on top of appending them on the main *student\_data.txt* file.

Your task is to implement the requirements of the Admission Committee. You will be provided with *student\_data.txt* file holding the information of five (05) students. After performing the above-mentioned analyses, you will store the results in 3 different txt files – *total\_gpa\_analysis.txt*, *ssc\_gpa\_analysis.txt*, *hsc\_gpa\_analysis.txt*. You will also append the results in *student\_data.txt* file.

### **A demo:**

After code execution:				
<i>student_data.txt</i> (Given)	<i>student_data.txt</i>	<i>total_gpa_analysis.txt</i>	<i>ssc_gpa_analysis.txt</i>	<i>hsc_gpa_analysis.txt</i>
<pre>id 1 name abc total_gpa 9.55 hsc 4.55 ssc 5.0  id 2 name def total_gpa 9.55 hsc 5.0 ssc 4.55  id 3 name xyz total_gpa 9.60 hsc 5.0 ssc 4.60  id 4 name pqr total_gpa 10 hsc 5.0 ssc 5.0  id 5 name ali total_gpa 9.67 hsc 4.67 ssc 5.0</pre>	<pre>id 1 name abc total_gpa 9.55 hsc 4.55 ssc 5.0  id 2 name def total_gpa 9.55 hsc 5.0 ssc 4.55  id 3 name xyz total_gpa 9.60 hsc 5.0 ssc 4.60  id 4 name pqr total_gpa 10 hsc 5.0 ssc 5.0  id 5 name ali total_gpa 9.67 hsc 4.67 ssc 5.0  TOTAL GPA ANALYSIS: ===== Total GPA: 10.00 ID: 4 ; Name: pqr ...  SSC GPA ANALYSIS: ===== ...  HSC GPA ANALYSIS: ===== ....</pre>	<pre>Total GPA: 10.00 ===== ID: 4 ; Name: pqr  Total GPA: 9.67 ===== ID: 5 ; Name: ali  Total GPA: 9.60 ===== ID: 3 ; Name: xyz  Total GPA: 9.55 ===== ID: 1 ; Name: abc ID: 2 ; Name: def</pre>	<pre>SSC GPA: 5.00 ===== ID: 1 ; Name: abc ID: 4 ; Name: pqr ID: 5 ; Name: ali  SSC GPA: 4.60 ===== ID: 3 ; Name: xyz  SSC GPA: 4.55 ===== ID: 2 ; Name: def</pre>	<pre>HSC GPA: 5.00 ===== ID: 2 ; Name: def ID: 3 ; Name: xyz ID: 4 ; Name: pqr  HSC GPA: 4.67 ===== ID: 5 ; Name: ali  HSC GPA: 4.55 ===== ID: 1 ; Name: abc</pre>

**Note:** You have to use structure in your code.

Show the contents of *student\_data.txt* on console.