

# Lab#09 Task

You are required to make GPA calculator in such a way that thread 1 will take all the necessary information from the user and pass it to second thread. The second thread will calculate grade points of all the subjects and return it to the main thread. The main thread will save all the grade and grade points of all the subjects in a text file named "20i-XXXX\_grade-points"(Your roll number). After that main thread will pass grade-points along with student name to another thread which will return the GPA of the student and also store it in text file named "20i-XXXX\_GPA". You have to create the threads by setting the thread attributes and also all the threads should be non-cancellable.

| Class            | Grade = Points | Hours | Points · Hours |
|------------------|----------------|-------|----------------|
| Sports Analysis  | A = 4          | 2     | 8              |
| Statistics       | A = 4          | 4     | 16             |
| Entrepreneurship | C = 2          | 4     | 8              |
| Crowd Funding    | C = 2          | 2     | 4              |
| Social Marketing | B = 3          | 4     | 12             |

total hours = 16

48 = total points

$$\text{GPA} = \frac{\text{total points}}{\text{total hours}} = \frac{48}{16} = 3.0 \longrightarrow \text{B average}$$