Create an efficient, well‐documented object‐oriented application to manage students’ transcripts information. A student object must contain their name and a valid GNumber. Students may take as many as 100 courses. For each course, the user should enter the course name, number of credits and grade. Note that the grade entered can contain +/‐; however, you should only store the letter grade (A,B,C,D,F). Program should allow multiple student objects to be created and filled with course information.

Once the students have all been entered, print a transcript for each student. After all the individual transcripts (which includes a list of courses and corresponding letter grades with #credits, the students GPA and an indication of their Honors status) are printed, prepare a summary that includes:

The number of HONORS students

The average GPA

The number of students whose GPA is above the average

Other information:

• GPA is calculated using the Quality Point algorithm (each A is worth 4 points, B – 3, C – 2, D – 1, F – 0; Find the sum of that value times the number of credits for all courses, then divide by the total number of credits.)

• A student is considered ‘HONORS’ if their GPA is at least 3.5