**Pseudo Code for Student Grade Management System**

**Step1:** Importing the **“java.util.Scanner”** to initialize the user inputs at run time.

**Step2**: Variables used for student grading system

* **Grade** of datatype **char**
* Variables used for assigning the home work values are homeworkOne, homeworkTwo, homeworkThree, homeworkFour, homeworkFive of type **double**.
* Variables used for assigning the quiz values are quizOne, quizTwo, quizThree, quizFour, quizFive of type **double**.
* Variable **midExam** of datatype **double**.
* Variable **Exam** of datatype **double**.
* Variable **project** of datatype **double**.

**Step3**: Generating the average values for each component.

* **avgHomework** = Home\_work(homeworkOne, homeworkTwo, homeworkThree, homeworkFour, homeworkFive) calling the **Home\_work()** function to assign the average value to the variable.
* **avgQuiz** = avg\_Quiz(quizOne, quizTwo, quizThree, quizFour, quizFive) calling the **avg\_Quiz()** function to assign the average value to the variable.

**Step4:** Functions to calculate the average of the Home work and Quiz marks.

* **Home\_work()** = (homeworkOne + homeworkTwo + homeworkThree + homeworkFour + homeworkFive)/5.
* **Avg\_Quiz()** = (quizOne + quizTwo + quizThree + quizFour + quizFive)/5

**Step5:** Figuring out each component percentile according to the course syllabus.

* 15% from the total Home Work marks
* 5% from the total Quiz marks
* 25% from the total Mid-Term exam marks
* 30% from the final exam marks
* 25% from the final project marks

**Step6:** Assigning the percentile values to the variable **Total** of data type **double**.

Double **Total** = (avgHomework\*015) + (avgQuiz\*0.5) + (midExam\*0.25) + (Exam\*0.30) + (project\*0.25)

**Step7:** Comparing to acquired total marks with the course grading standards using **elseif condition.**

**Step8:** elseif condition to assign the Grade

* if (Total<=100 && Total>=95) then Grade = A+
* else if (Total<=94 && Total>=90) then Grade = A
* else if (Total<=89 && Total>=85) then Grade = B+
* else if (Total<=84 && Total>=80) then Grade = B
* else if (Total<=79 && Total>=75) then Grade = C+
* else if (Total<=74 && Total>=70) then Grade = C
* else if (Total<=69 && Total>=65) then Grade = D+
* else if (Total>=60) then Grade = D
* else then Grade = F (else condition runs when the student marks is less than the 60%).

**Step9**: In the final stage it generates the final grade of the and prints the student total marks and grade of the student assigned to the variable **Total** and **Grade**.