**Student Struct:**

|  |  |
| --- | --- |
| **Attributes** | **Format** |
| name | A c-string with 30 characters |
| id | A c-string t represent id. Student id consists of 7 digits with the first 2 digit represent years enroll. E,g.: 1300345 |
| course | Use 2 characters to represent:  CS – Computer Science  IA – Information Systems Engineering  IB – Business Information Systems  CN – Communication and Networking  CT – Computer Engineering |
| phone\_no | A 7 digits number in the following format: 123-4567 |
| current\_cpga | The latest cgpa for a student with 5 decimal places. E.g.: 3.51762 |
| totalCreditsEarned | Total credits earned so far. |
| exam | An array to store past exam for a student according to trimester. This array can store up to 10 trimester result. |
| exam\_cnt | A counter to keep track of the number of past exam result store in exam array. |

**Exam Struct:**

|  |  |
| --- | --- |
| **Attributes** | **Format** |
| trimester | Store the trimester of the exam using integer to represent the 3 trimester in a year as follow:  1 – January Trimester  5 – May Trimester  10 – October Trimester |
| year | A four digit integer to represent the year of the exam. |
| gpa | GPA obtained for a trimester. Use 5 decimal points to represent the value. |
| numOfSubjects | The number of subjects taken in that trimester. |
| sub[] | The subject information taken in that trimester. Each element is an object of class Subject. Maximum only 6 subjects can be taken and minimum is 1 subject. |

**Subject Struct:**

|  |  |
| --- | --- |
| **Attributes** | **Format** |
| subject\_code | A string with 10 characters to represent a code for a subject. First four characters represent must be alphabet and last four are digits. |
| subject\_name | A string represents the subject names. |
| credit\_hours | Number of credit hours for a subject. |
| marks | Marks obtained for a subject. Range is from 1 to 100. |