## Indo-US College Database –CRUD Matrix

Learn how to build and analyze a CRUD matrix

### CRUD Matrix

| **Table . Attribute** | * 1. **Process Report Cards** |  |  |  |
| --- | --- | --- | --- | --- |
| **IU\_MAJOR** |  |  |  |  |
| **.MajorId [PK]** |  |  |  |  |
| **.MajorDesc** |  |  |  |  |
| **IU\_STUDENT** |  |  |  |  |
| **.StudentId [PK]** |  |  |  |  |
| **.Last** |  |  |  |  |
| **.First** |  |  |  |  |
| **.Street** |  |  |  |  |
| **.City** |  |  |  |  |
| **.Province** |  |  |  |  |
| **.PostCode** |  |  |  |  |
| **.StartTerm** |  |  |  |  |
| **.BirthDate** |  |  |  |  |
| **.Phone** |  |  |  |  |
| **.MajorId [FK]** |  |  |  |  |
| **.FacultyId [FK]** |  |  |  |  |
| **IU\_FACULTY** |  |  |  |  |
| **.FacultyId [PK]** |  |  |  |  |
| **.Name** |  |  |  |  |
| **.Phone** |  |  |  |  |
| **.DeptId [FK]** |  |  |  |  |
| **.RoomId [FK]** |  |  |  |  |
| **IU\_DEPARTMENT** |  |  |  |  |
| **.DeptId [PK]** |  |  |  |  |
| **.DeptName** |  |  |  |  |
| **.FacultyId [FK]** |  |  |  |  |
| **IU\_REGISTRATION** |  |  |  |  |
| **.Csid [PK][FK]** |  |  |  |  |
| **.StudentId [PK][FK]** |  |  |  |  |
| **.MidTerm** |  |  |  |  |
| **.Final** |  |  |  |  |
| **IU\_CRSSECTION** |  |  |  |  |
| **.Csid [PK]** |  |  |  |  |
| **.Section** |  |  |  |  |
| **.Day** |  |  |  |  |
| **.StartTime** |  |  |  |  |
| **.EndTime** |  |  |  |  |
| **.MaxCount** |  |  |  |  |
| **.Courseid [FK]** |  |  |  |  |
| **.TermId [FK]** |  |  |  |  |
| **.RoomId [FK]** |  |  |  |  |
| **.FacultyId [FK]** |  |  |  |  |
| **IU\_COURSE** |  |  |  |  |
| **.Courseid [PK]** |  |  |  |  |
| **.Title** |  |  |  |  |
| **.Credits** |  |  |  |  |
| **IU\_LOCATION** |  |  |  |  |
| **.Roomid [PK]** |  |  |  |  |
| **.Building** |  |  |  |  |
| **.RoomNo** |  |  |  |  |
| **.Capacity** |  |  |  |  |
| **.RoomType [FK]** |  |  |  |  |
| **IU\_TERM** |  |  |  |  |
| **.Termid [PK]** |  |  |  |  |
| **.TermDesc** |  |  |  |  |
| **.StartDate** |  |  |  |  |
| **.EndDate** |  |  |  |  |
| **IU\_ROOM** |  |  |  |  |
| **.RoomType [PK]** |  |  |  |  |
| **.RoomDesc** |  |  |  |  |
| **Totals** |  |  |  |  |
| **.Number of Entities Read** |  |  |  |  |
| **.Number of Entities Created** |  |  |  |  |
| **.Number of Entities Updated** |  |  |  |  |
| **.Number of Entities Deleted** |  |  |  |  |

1. Print the report cards for a term. The report card should include the term start and end dates, the student’s name, number and address and the course number, name, credits and mark for each course taken during the term. The grade point average should also be output for the student[[1]](#footnote-1). The user will be prompted for the term id. (*Report Cards)*

1. To calculate the grade point average, each letter grade is converted to a numeric value and the average of the numbers is calculated. (The grade equivalencies are: A:4, A-: 3.7, B+:3.3, B:3, B-:2.7, C+:2.3, C:2, C-:1.7, D+:1.3, D:1, D-:0.7, F:0) [↑](#footnote-ref-1)