# STUDENT MANAGEMENT SYSTEM
## ER diagram and Relational schema

NIRMA UNIVERSITY
NAAC ACCREDITED 'A' GRADE

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# INTRODUCTION

The student management system consists of a basic database model which exhibts all the properties which imply certain importance and properties that are managed for students. For the first stage of this assignment, a entity relationship model is created which defines all the properties in the form of entities and relationship that are executed for and by the students. A relational model is also shown which tells us how the entities are connected with ceratin attributes which are normal or primary key or a foriegn key.

# ENTITIES USED AND THEIR ATTRIBUTES

| STUDENT | | | |
|---|---|---|---|
| **Field** | **Data Type** | **Description** | **Constraints** |
| **Sid** | Int | Student id number | Primary key |
| **name** | varchar | Name of the student | Not null |
| **mother_name** | varchar | Mothers name of the student | |
| **gender** | Char | Students gender | Not null |
| **birthdate** | Date | Students date of birth | Not null |
| **bank_ac_no** | Varchar | Bank account number | Default null |
| **bank_no** | Varchar | Number related to bank | Foreign key References banks(bank_no) |
| **aadhar_no** | Varchar | Aadhar number | Default null |
| **uid_no** | Varchar | | Default null |
| **contact_no** | Varchar | Contact number of the student | Default null |
| **course_id** | Int | Course id of the course selected by the student | Foreign key References course(course_id) |
| **exam_id** | Int | Exam id of the student | Foreign key References exam(exam_id) |

# ENTITIES USED AND THEIR ATTRIBUTES

| BANKS | | | |
|---|---|---|---|
| **Field** | **Data Type** | **Description** | **Constraints** |
| **bank_no** | Int | Bank number | Primary key |
| **bank_name** | Varchar | Name of the bank | Not null |
| **Place** | Varchar | Location of place | Not null |

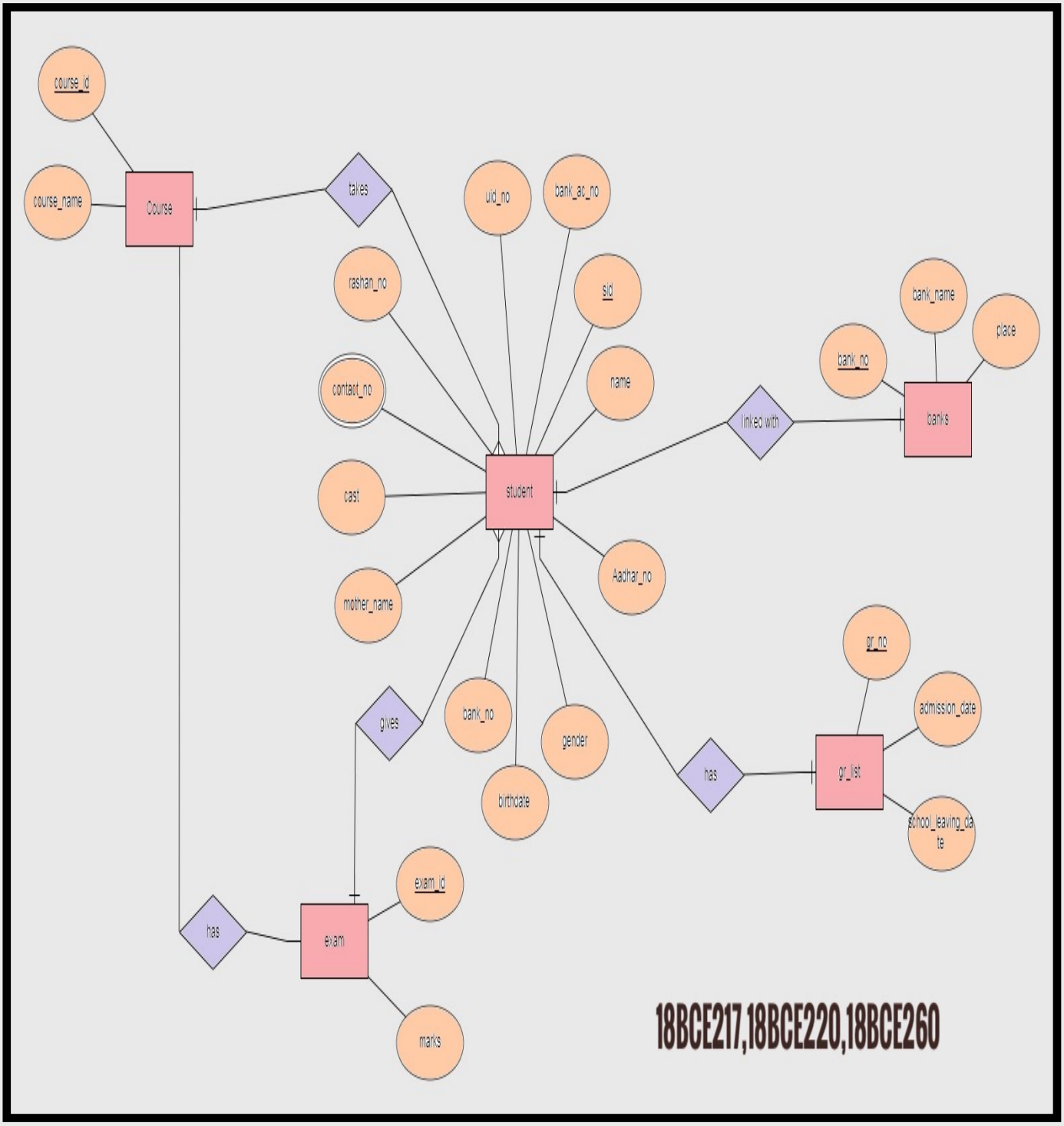
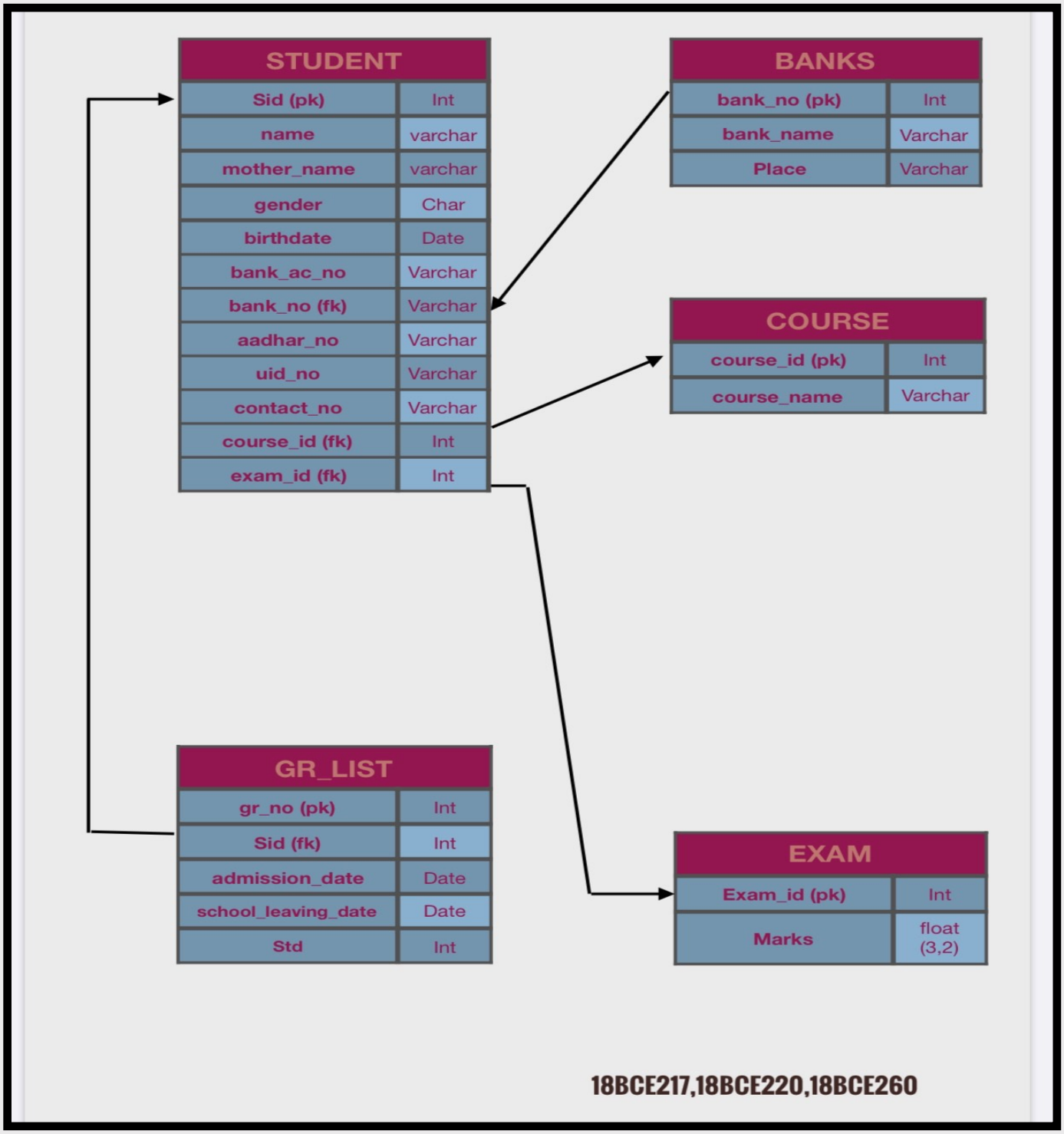
| GR_LIST | | | |
|---|---|---|---|
| **Field** | **Data Type** | **Description** | **Constraints** |
| **gr_no** | Int | Gr number | Primary key |
| **Sid** | Int | Student id number | Foreign key References students(sid) |
| **admission_date** | Date | Date of the admission of the student | Not null |
| **school_leaving_date** | Date | Date of leaving the school of the student | Default null |
| **Std** | Int | Standard of the student | Not null |

# ENTITIES USED AND THEIR ATTRIBUTES

| EXAM | | | |
|---|---|---|---|
| **Field** | **Data Type** | **Description** | **Constraints** |
| **Exam_id** | Int | Exam id | Primary key |
| **Marks** | float(3,2) | Marks obtained by student in exam | Default null |

| COURSE | | | |
|---|---|---|---|
| **Field** | **Data Type** | **Description** | **Constraints** |
| **course_id** | Int | Course id | Primary key |
| **course_name** | Varchar | Name of course offered by the school | Not null |

# ENTITY-RELATIONSHIP DIAGRAM



# RELATIONAL SCHEMA