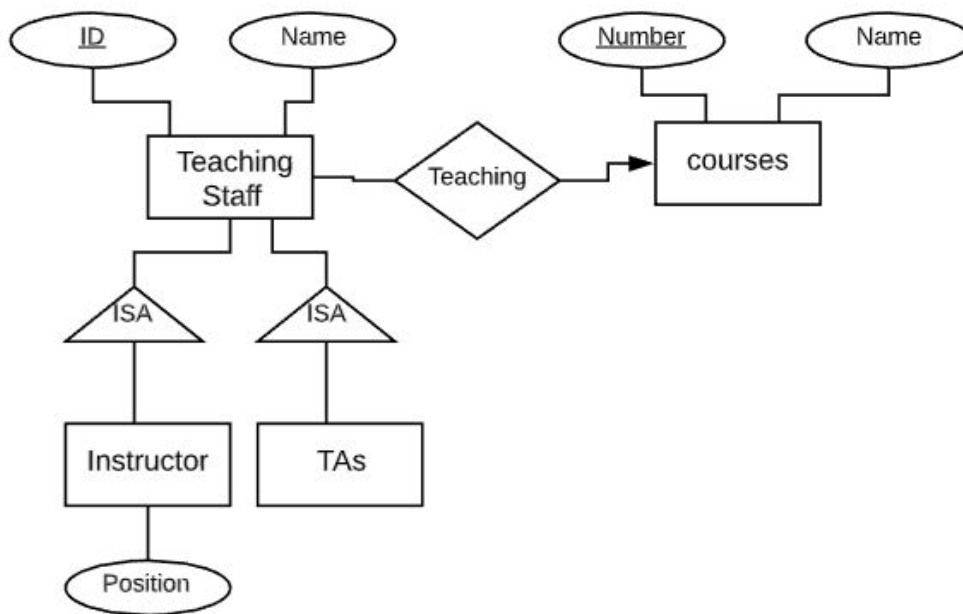
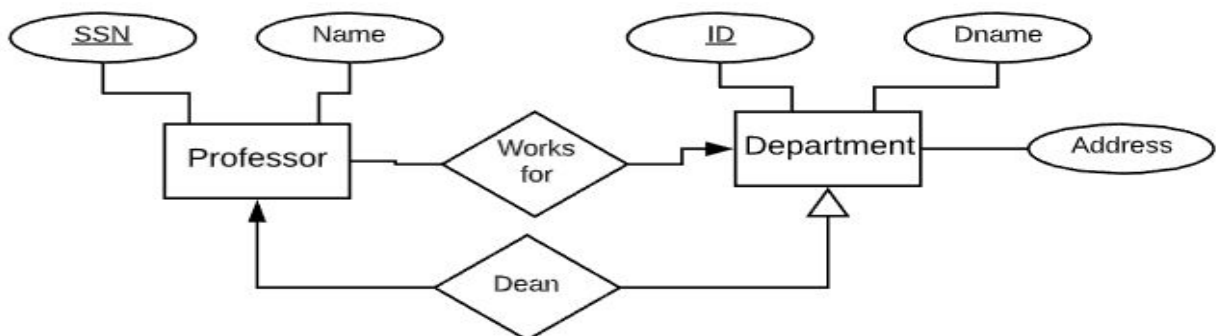
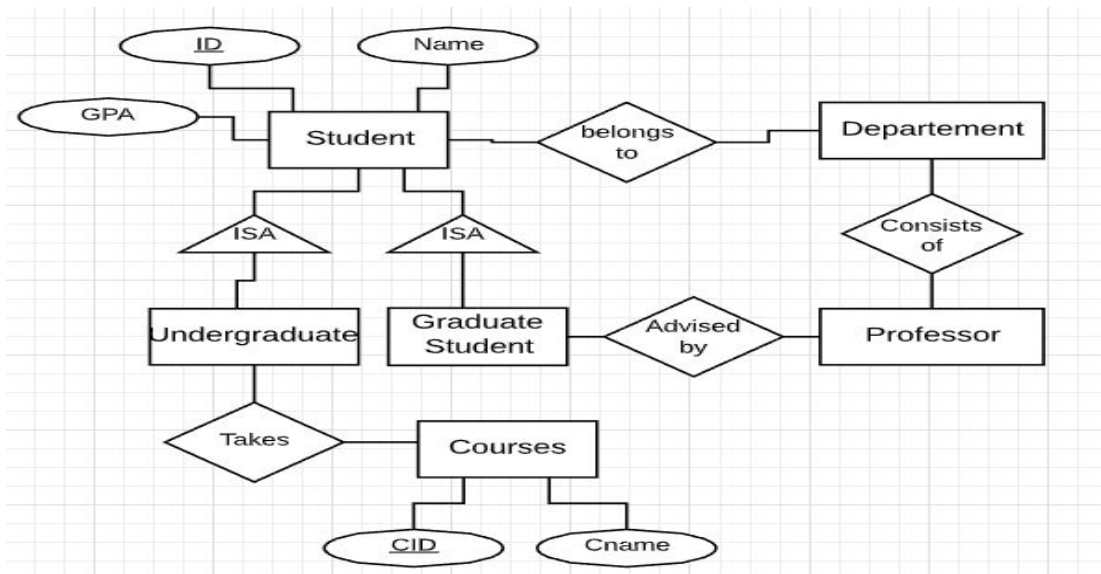


Problem 1)**Mistakes**

1. The ID is the unique key for the Teaching-staff entity.
2. TAs will derive the ID from the Teaching Staff entity set.
3. Position within a department missing for instructor entity as mentioned in the problem statement.
4. As the course entity has its own unique key i.e., Course ID so it will not be a weak entity.
5. For many to one relation, there will be directed arrow from the teaching staff to the courses entity set.

Problem 2.1)

Problem 2.2)



Problem 3)

John Mullis: Students (3512, 3.5), Undergraduate

Zhe Zhang: Students (4110, 3.6), Graduate Student

Problem 4)

4.1)

```
MariaDB [spawar2]> select * from BOOKS where price > 9.00;
```

BOOK_TITLE	ID	PRICE	AVAILABLE
All about DBMS	17	13.49	5
Jack the Ripper	13	9.99	1
Napoleon and Blucher	5	9.99	0

3 rows in set (0.00 sec)

Extract all rows from the BOOKS table where the price is greater than 9.00.

```
MariaDB [spawar2]> select * from BOOKS where price <= 9.00;
```

BOOK_TITLE	ID	PRICE	AVAILABLE
Queen Lucia	72	5.99	0
A Calendar of Sonnets	101	3.49	15

2 rows in set (0.00 sec)

Extract all rows from the BOOKS table where the price is less than or equal to 9.00.

4.2)

```
MariaDB [spawar2]> select * from BOOKS where BOOK_TITLE = 'Queen Lucia';
```

BOOK_TITLE	ID	PRICE	AVAILABLE
Queen Lucia	72	5.99	0