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CSE 4071 Databases

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Project 1 Part 1

Course Table:

```
mysql> select * from course;
+-----+-----+
| cno | cname          |
+-----+-----+
| 12  | Mathematics I  |
| 13  | Mathematics III|
| 15  | Physics        |
| 17  | Chemistry      |
| 2   | Biology        |
| 21  | Computer Science|
| 3   | Geography      |
| 4   | History        |
+-----+-----+
8 rows in set (0.03 sec)
```

Result Table:

```
mysql> select * from result;
+-----+-----+-----+
| cno | sno | score |
+-----+-----+-----+
| 2   | 2   | 69    |
| 2   | 14  | 63    |
| 2   | 20  | 71    |
| 2   | 24  | 72    |
| 2   | 31  | 82    |
| 2   | 33  | 94    |
| 3   | 14  | 58    |
| 3   | 20  | 80    |
| 12  | 2   | 78    |
| 12  | 4   | 82    |
| 12  | 14  | 37    |
| 12  | 24  | 67    |
| 12  | 33  | 90    |
| 13  | 4   | 92    |
| 13  | 6   | 44    |
| 13  | 24  | 78    |
| 13  | 33  | 78    |
| 15  | 4   | 72    |
| 15  | 6   | 52    |
| 15  | 11  | NULL  |
| 15  | 14  | 61    |
| 15  | 24  | 83    |
| 15  | 33  | 97    |
+-----+-----+-----+
23 rows in set (0.00 sec)
```

Student table:

```
mysql> select * from student;
+-----+-----+-----+-----+
| sno | sname      | address | sex |
+-----+-----+-----+-----+
| 1   | N. J. Sloane | Whitney | F   |
| 2   | M.Roberts   | Cambridge | M   |
| 4   | T.Smith     | Cambridge | F   |
| 6   | J.Brown     | Whitney | M   |
| 11  | N.Park      | Whitney | M   |
| 14  | D. E. Knuth | Whitney | M   |
| 20  | I.Blake     | Holcomb | M   |
| 22  | S.Conners   | Holcomb | F   |
| 24  | D.Davisson  | E.Quad  | M   |
| 31  | L.Gatlin    | Holcomb | F   |
| 33  | U.Smith     | Cambridge | F   |
+-----+-----+-----+-----+
11 rows in set (0.02 sec)
```

Proving that the Primary Keys are set properly:

def	project_1	PRIMARY		project_1	course
		PRIMARY KEY	YES		
def	project_1	PRIMARY		project_1	student
		PRIMARY KEY	YES		
def	project_1	PRIMARY		project_1	result
		PRIMARY KEY	YES		

This screen shot was taking from querying the information schema.

Adding Foreign Keys to Result Table:

```
mysql> alter table result add foreign key (cno) references course(cno);
Query OK, 23 rows affected (0.22 sec)
Records: 23 Duplicates: 0 Warnings: 0

mysql> alter table result add foreign key (sno) references student(sno);
Query OK, 23 rows affected (0.12 sec)
Records: 23 Duplicates: 0 Warnings: 0
```

Proving that Foreign Keys are set properly:

def	project_1	result_ibfk_1		project_1	result
		FOREIGN KEY	YES		
def	project_1	result_ibfk_2		project_1	result
		FOREIGN KEY	YES		