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Group 4, section 1

1st task:

```
CREATE DATABASE Company;
```

```
Use Company;
```

```
CREATE TABLE EMPLOYEE (
```

```
    ssn int NOT NULL,
```

```
    fname varchar(255) not null,
```

```
    lname varchar(255) not null,
```

```
    bdate DATE not null,
```

```
    address varchar(255) not null,
```

```
    gender varchar(7) not null,
```

```
    salary float not null,
```

```
    Don int not null,
```

```
    PRIMARY KEY (ssn),
```

```
    //FOREIGN KEY (Don) REFERENCES  
    DEPARTMENT(Dnumber)
```

```
);
```

```
CREATE TABLE DEPARTMENT (
```

```
    Dnumber int NOT null,
```

```
    Dname varchar(255) not null,
```

```
    mgr_ssn int NOT null,
```

```
    mgr_start_date date not null,
```

```
    PRIMARY KEY (Dnumber),
```

```
    FOREIGN KEY (mgr_ssn) REFERENCES  
    employee(ssn)
```

```
);
```

```
CREATE TABLE PROJECT (
```

```
    Pnumber int NOT null,
```

```
    Pname varchar(255) not null,
```

```
    Plocation varchar(255) not null,
```

```
    Dno int not null,
```

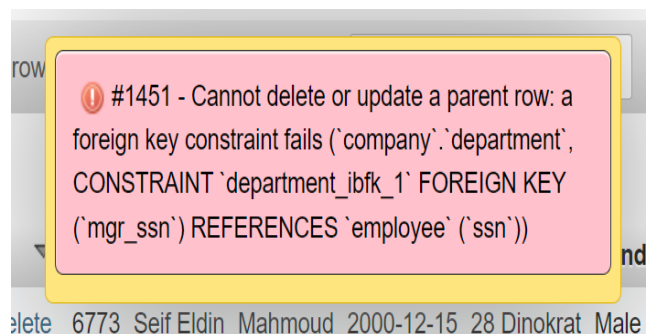
```
    PRIMARY KEY (Pnumber),
```

```
    FOREIGN KEY (Dno) REFERENCES  
    department(Dnumber),
```

```
    UNIQUE (Pname)
```

```
);
```

ON Deleting the inserted row that references the Department happens because we cannot delete the row that is referred to it by a foreign key without telling the engine what to do to the referred data either to update it or to delete it or to be cascaded




On Inserting a row in the PROJECT table that references a row in the Department that

doesn't exist yet.

Error

SQL query: [Copy](#)

```
INSERT INTO `project`(`Pnumber`, `Pname`, `Plocation`, `Dno`) VALUES ('1','1st Project','Alexandria','2');
```

MySQL said: 

```
#1452 - Cannot add or update a child row: a foreign key constraint fails (`company`.`project`,  
CONSTRAINT `project_ibfk_1` FOREIGN KEY (`Dno`) REFERENCES `department` (`Dnumber`))
```

To be able to insert the foreign key of the database we can disable the foreign key in order to enter the 1st element “row” in our database manually to enter the data “not the efficient way at all”

Or we can use “SET FOREIGN_KEY_CHECKS=0;” to disable the foreign key check till we insert the data to one of the tables which must be Department as it is the less content, and all the employees depend on it also the number of managers to the department will be easy to check on it.

Then use the “SET FOREIGN_KEY_CHECKS=1;” command to turn it on again.