### Binary data

```
    BLOB: (2^16)-1 bytes

 MEDIUMBLOB: (2^24)-1 bytes

    LONGBLOB: (2<sup>32</sup>)-1 bytes

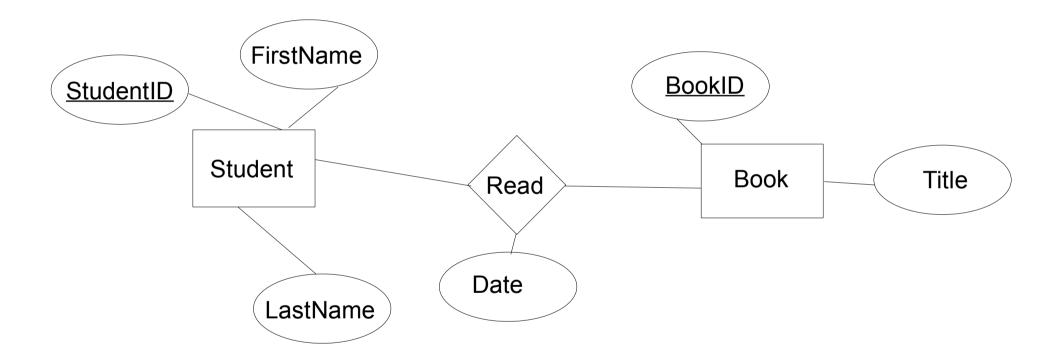
mysql> CREATE TABLE BinDataTable
            (FileID INT NOT NULL AUTO INCREMENT,
            FileName VARBINARY (200),
            FileData MEDIUMBLOB,
            PRIMARY KEY (FileID)
             ENGINE=InnoDB;
mysql> INSERT INTO BinDataTable VALUES
  (null, 'P1.odt',
 LOAD FILE ('/home/chadd/cs445Data/P1.odt'));
```

#### **Translation:**

E-R diagram to MySQL

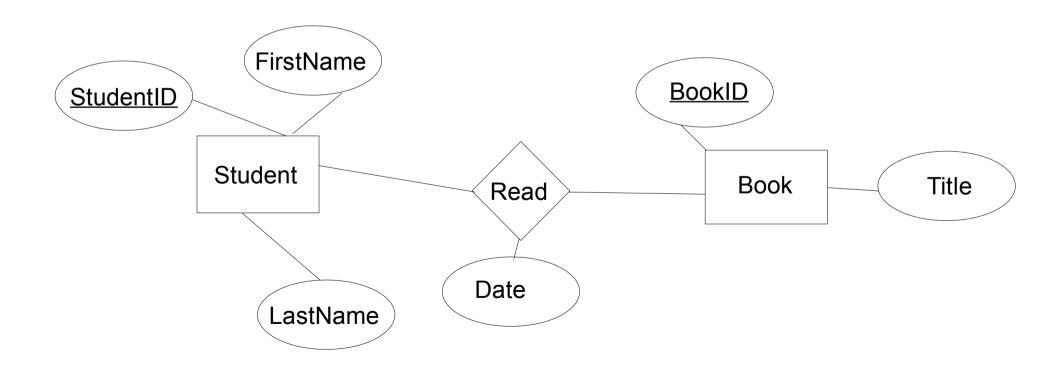
#### **Entities**

 An entity that is not involved in a relationship with constraints can be directly translated to a table.



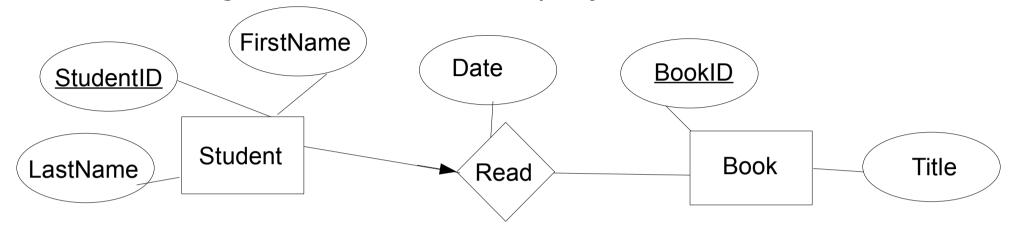
# Relationships (w/o constraints)

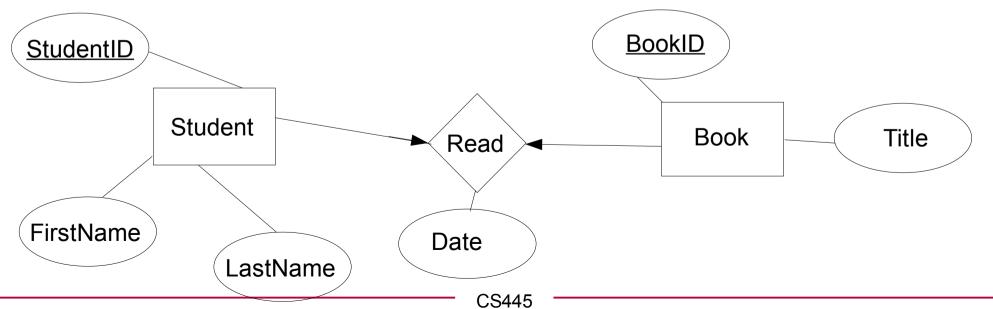
- Relationships w/o constraints can be translated directly into a table.
- Need to add FOREIGN KEY constraints



### Relationships w/contraints

• In the diagram below, what uniquely IDs entries in Read?





# Relationships w/contraints

