

1. So for a **Primary Key** is that it is selected to identify tuples uniquely within the relation the candidate keys which are not selected as packets are called alternate keys but can't be null. A **Candidate key** is a super key that has no subset and is a super key in relation. Finally a **Super Key** is an attribute or set of attributes that uniquely identify tuple within a relation.
2. An example of data types would be a data table titled James Bond Films. The first row would be a numbered list of the movies which is a numeric type of data, followed by the next row being the release date which is another numeric type, the rest of the columns are text data type which would be title, director, name of Bond actor, and like in class their special super power, basically their unique attribute. Connery with his unique accent and super bad ass style, Roger Moore with his caninness, and so on. Each row could be fulfilled except when it comes down to Superpower's because once we get to Daniel Craig he has no Superpowers which would be null. If you leave it null the table would be invalid because field was labeled not null.
3. The first rule means that intersection between a row and column can only have one piece of data. For the Bond table you can't have two superpowers in one field on the table because you can't access it if you're accessing one thing. The second rule means data can only be accessed by what it is rather than its location on a table. Sets have no implicit order to them so that you can't pin point and say you want the second value because they are no integers. The third rule means the all rows must be unique. As in it has to be unique in every row in at least one column.