Excercise 3.2:

The cardinality of a relation instance is defined as being the number of tuples in the instance. If the relation instance has a cardinality of 22, then there are 22 tuples in the instance.

Excercise 3.5:

1. {Name, Age} is not a candidate key because two people may both have the same first names and be the same age, however, they would have different sid's because they are two different people.
2. {Name, Login} is a candidate key because there cannot be two entries in the table which contain the same values for both of these fields (The entries would be duplicate entries for the same user).

Excercise 3.8:

1. 'managerid' must reference a primary key which exists inside the 'Works' table. This is because a manager is also an employee working for a department. If a user attempts to delete a 'Dept' tuple there are several options:
    - Reject the Deletion of the 'Dept' tuple.
    - Disallow the deletion of a 'Dept' tuple if there are 'Works' entries which reference it (via 'did').
    - Set the 'did' entry of the 'Works' tuple referencing the 'Dept' tuple to be deleted to *null*.
    - Set the 'did' entry of the 'Works' tuple referencing the 'Dept' tuple to be deleted to reference some 'default' entry in the 'Dept' table to mark that the 'Dept' tuple being referred to has been deleted.

2. 3. 4. 5. All in HW3.sql

6. (code in HW3.sql) The SQL statement will result in all employees who are currently working in the Toy department to have their department field set to 'null' after the query is executed.

Final Part: (In HW3.sql)