

- 2 Add records for the characters of the cartoon show **Kung Fu Panda** in the Characters table **without** adding a value on the cartoon_id column as we have not added Kung Fu Panda in the Cartoons table..

```
INSERT INTO Characters(character_name, gender) VALUES("Po", "male");
INSERT INTO Characters(character_name, gender) VALUES("Tigress", "female");
INSERT INTO Characters(character_name, gender) VALUES("Shifu", "male");
INSERT INTO Characters(character_name, gender) VALUES("Viper", "female");
```

- 3 Let's use an **INNER JOIN** to display the list of characters and the cartoon show they are part of. You will see that only characters linked to a cartoon show are visible. Note that the two tables are joined by the common field **cartoon_id** in the **ON** clause.

```
SELECT ch.character_name, c.cartoon_name FROM Characters ch
JOIN Cartoons c ON ch.cartoon_id=c.cartoon_id;
```

- 4 We can use the **LEFT JOIN** to display a list of **all** the characters in the characters table regardless of whether or not they are linked to a record in the Cartoons table. You will see that characters not linked to any cartoons will have a **Null** value.

```
SELECT ch.character_name, c.cartoon_name FROM Characters ch
LEFT JOIN Cartoons c ON ch.cartoon_id=c.cartoon_id;
```

- 5 We can use the **RIGHT JOIN** to display all the data in the right table, in this case the Cartoons table, to display all its records first then check if it is linked to any record in the Characters table. If it's not linked to any Characters, it will display it as **Null**.

```
SELECT ch.character_name, c.cartoon_name FROM Characters ch
RIGHT JOIN Cartoons c ON ch.cartoon_id=c.cartoon_id;
```

Fun Exercise!

Can you display a list of all female characters in the Characters table and the cartoon show they are part of? Hint: You will need to use a WHERE clause