

NULL values

What do we do when we have to compare a value against a NULL value? Is NULL < 8?
Are 2 NULL values equal to each other?

Let's look at an example:

```
mysql> SELECT * FROM Enrolled;
+-----+-----+-----+-----+
| SID | ClassID | Grade | Credits |
+-----+-----+-----+-----+
| 1 | CS314 | NULL | NULL |
| 1 | CS575 | NULL | 4 |
| 2 | CS430 | NULL | 4 |
| 2 | CS575 | NULL | 4 |
| 3 | CS314 | NULL | NULL |
| 3 | CT320 | NULL | 4 |
+-----+-----+-----+-----+
6 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM Enrolled
-> WHERE Credits < 4;
Empty set (0.00 sec)
```

```
mysql> SELECT * FROM Enrolled
-> WHERE Credits > 4;
Empty set (0.00 sec)
```

Neither of these comparisons evaluated to TRUE – which is of course what we want.
Now how about 2 NULL values? Do they compare to equal?

```
mysql> SELECT * FROM Enrolled E1, Enrolled E2
-> WHERE E1.Credits = E2.Credits AND
-> E1.ClassID = "CS314";
Empty set (0.01 sec)
```

How do we handle NULL? There is a special operator to check for it.

```
mysql> SELECT * FROM Enrolled E1
-> WHERE E1.Credits IS NULL;
+-----+-----+-----+-----+
| SID | ClassID | Grade | Credits |
+-----+-----+-----+-----+
| 1 | CS314 | NULL | NULL |
| 3 | CS314 | NULL | NULL |
+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

Note that the following will not work:

```
mysql> SELECT * FROM Enrolled E1
-> WHERE E1.Credits = NULL;
Empty set (0.00 sec)
```
