CUNEF
UNIVERSIDAD

DATABASE SYSTEMS COURSE 2021/2022

SESSION 5

SESSION 5

- **DATA ORDERING**
- UNIQUE RECORDS
- FILTERING CLAUSES

ORDER BY Syntax

MySQL/Oracle

- **SELECT** *field1, field2, field3*
  FROM *table*
  WHERE *field1* **=** *ValueField1*
  ORDER BY *field1* **ASC;**

- **SELECT** *field1, field2, field3*
  FROM *table*
  WHERE *field1* **=** *ValueField1*
  ORDER BY *NumberOfField* **DESC;**

<u>NOTE:</u> **By default it performs ASCENDING sorting**

DATA ORDERING

ORDER BY Example

┌─ **MySQL/Oracle** ──────────────────────────────┐

- **SELECT** movie_id, vote_average, title
  FROM moviebig
  WHERE vote_average **>** 8
  ORDER BY vote_average **ASC;**

- **SELECT** movie_id, vote_average, title
  FROM moviebig
  WHERE vote_average**>**8
  ORDER BY 2 **ASC;**

	MOVIE_ID	VOTE_AVERAGE	TITLE
1	3082	8,1	Modern Times
2	122	8,1	The Lord of
3	807	8,1	Se7en
4	284	8,1	The Apartmen
5	242575	8,1	Guten Tag, R
6	274	8,1	The Silence
7	11	8,1	Star Wars
8	157336	8,1	Interstellar
9	694	8,1	The Shining
10	629	8,1	The Usual Su
11	598	8,1	Cidade de De
12	207	8,1	Dead Poets S
13	264644	8,1	Room
14	429	8,1	Il buono, il
15	27205	8,1	Inception
16	27322	8,1	Love Jones
17	77	8,1	Memento
18	335	8,1	C'era una vo
19	1891	8,2	The Empire S
20	769	8,2	GoodFellas
21	155	8,2	The Dark Kni

DATA ORDERING

ORDER BY Example

MySQL/Oracle

- **SELECT** movie_id, vote_average, title, budget, revenue
  FROM moviebig
  WHERE vote_average **>** 8
  ORDER BY vote_average **ASC**,title **DESC**;

- **SELECT** movie_id, vote_average, title, budget, revenue
  FROM moviebig
  WHERE vote_average**>**8
  ORDER BY 2 **ASC**,3 **DESC**;

movie_id *	vote_average	title	budget	revenue
629	8,10	The Usual Suspects	6000000	23341568
274	8,10	The Silence of the Lambs	19000000	272742922
694	8,10	The Shining	19000000	44017374
122	8,10	The Lord of the Rings: The Return of the King	94000000	1118888979
284	8,10	The Apartment	3000000	25000000
11	8,10	Star Wars	11000000	775398007
807	8,10	Se7en	33000000	327311859
264644	8,10	Room	6000000	35401758
3082	8,10	Modern Times	1	8500000
77	8,10	Memento	9000000	39723096
27322	8,10	Love Jones	10000000	0
157336	8,10	Interstellar	165000000	675120017
27205	8,10	Inception	160000000	825532764
429	8,10	Il buono, il brutto, il cattivo	1200000	6000000
242575	8,10	Guten Tag, Ramón	4000000	0
207	8,10	Dead Poets Society	16400000	235860116
598	8,10	Cidade de Deus	3300000	30641770
335	8,10	C'era una volta il West	5000000	5321508
346	8,20	七人の侍	2000000	271841
4935	8,20	ハウルの動く城	24000000	234710455
128	8,20	もののけ姫	26500000	159375308

SESSION 5

- DATA ORDERING
- **UNIQUE RECORDS**
- FILTERING CLAUSES

UNIQUE RECORDS
DISTINCT Syntax

MySQL/Oracle

```
SELECT DISTINCT Field1, Field2
FROM table
WHERE Field1 = Value1
AND ...
```

UNIQUE RECORDS
DISTINCT Example

MySQL/Oracle

SELECT DISTINCT movie_status
FROM moviebig;

	MOVIE_STATUS
1	Released
2	Post Production
3	Rumored

MySQL/Oracle

SELECT DISTINCT
movie_status, vote_average
FROM moviebig;

	MOVIE_STATUS	VOTE_AVERAGE
1	Released	7,3
2	Released	8,1
3	Released	6,2
4	Released	4,4
5	Released	3,9
6	Released	2,3
7	Released	9,3
8	Released	1,9

SESSION 5

- DATA ORDERING
- UNIQUE RECORDS
- **FILTERING CLAUSES**

FILTERING CLAUSES

BETWEEN Syntax

MySQL/Oracle

```
SELECT field1, field2
FROM table
WHERE field1 BETWEEN RangeStart AND RangeEnd

AND field2 = Field2Value
```

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BETWEEN Example

MySQL/Oracle

```
SELECT title, runtime
FROM moviebig
WHERE runtime BETWEEN 100 AND 120;
```

	TITLE	RUNTIME
1	Pretty Woman	119
2	The Big Lebowski	117
3	The Untouchables	119
4	Charlie and the Chocolate Factory	115
5	O Brother, Where Art Thou?	106

FILTERING CLAUSES

BETWEEN Example

MySQL

```
SELECT title, release_date FROM
moviebig
WHERE release_date BETWEEN
"2000-01-01" AND "2004-12-31";
```

Oracle

```
SELECT title, release_date FROM
moviebig
WHERE release_date BETWEEN
'01-01-2000' AND '31-12-2004';
```

title	release_date
Finding Nemo	30/05/2003 0:00:00
Dancer in the Dark	17/05/2000 0:00:00
My Life Without Me	07/03/2003 0:00:00
Pirates of the Caribbean: The Curse of the Black Pearl	09/07/2003 0:00:00
Kill Bill: Vol. 1	10/10/2003 0:00:00
Eternal Sunshine of the Spotless Mind	19/03/2004 0:00:00
Amores perros	16/06/2000 0:00:00
8 Mile	08/11/2002 0:00:00

NOT Syntax

MySQL/Oracle

```
SELECT field1, field2
FROM table
WHERE NOT field1 = Field1Value AND
      NOT field2 = Field2Value
```

NOT Examples

MySQL/Oracle

```
SELECT movie_id, title,
popularity
FROM moviebig
WHERE NOT popularity > 25;
```

MOVIE_ID	TITLE	POPULARITY
152	Star Trek: The Motion Picture	24.616634
154	Star Trek II: The Wrath of Khan	22.434102
157	Star Trek III: The Search for Spock	15.314027
168	Star Trek IV: The Voyage Home	22.258428
172	Star Trek V: The Final Frontier	19.578249

FILTERING CLAUSES
IN/NOT IN Syntax

MySQL/Oracle

```
SELECT *
FROM table
WHERE Field1 IN (Value1, Value2,..., ValueN)


SELECT *
FROM table
WHERE Field1 NOT IN (Value1, Value2,..., ValueN)
```

IN/NOT IN Example

MySQL/Oracle

```
SELECT title, movie_status
FROM moviebig
WHERE movie_status
IN ('Post Production','Rumored');
```

title	movie_status
Little Big Top	Rumored
The Helix... Loaded	Rumored
Higher Ground	Post Production
Crying with Laughter	Rumored
The Harvest (La Cosecha)	Rumored
The Naked Ape	Rumored
Brotherly Love	Post Production
Dancin' It's On	Post Production

MySQL/Oracle

```
SELECT title, movie_status
FROM moviebig
WHERE movie_status
NOT IN ('Released');
```

title	movie_status
Little Big Top	Rumored
The Helix... Loaded	Rumored
Higher Ground	Post Production
Crying with Laughter	Rumored
The Harvest (La Cosecha)	Rumored
The Naked Ape	Rumored
Brotherly Love	Post Production
Dancin' It's On	Post Production