

# CT230 Database Systems – Assignment 6

## By Luke Gibbons – 09/11/2018

### Plagiarism Declaration:

“I am aware of what plagiarism is and include this here to confirm that this work is my own”

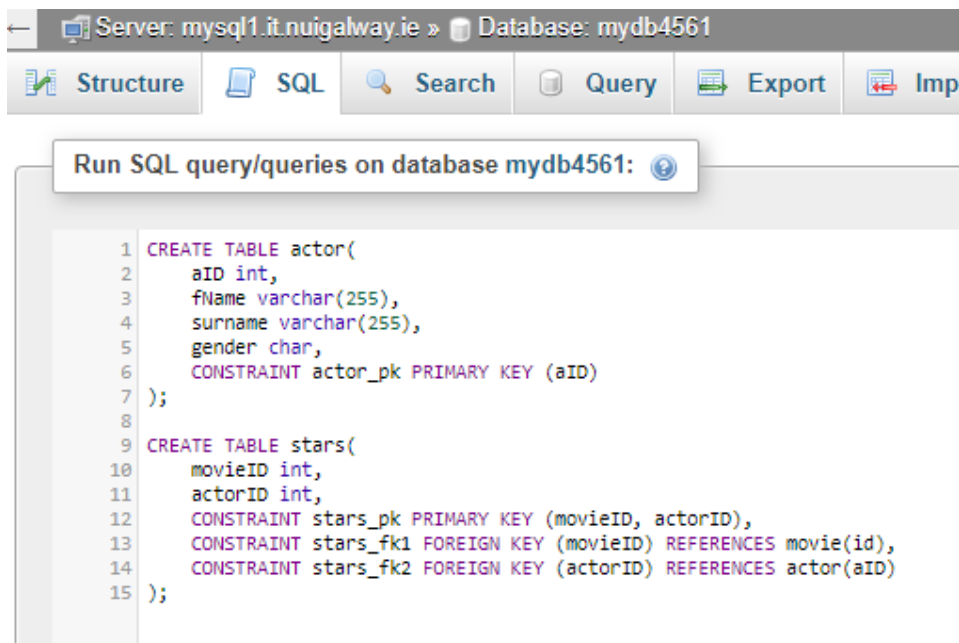
Screenshot of SQL command output for date, time, name & student ID:

+ Options

now()	database()	Luke Gibbons	15553883
2018-11-09 19:58:54	mydb4561	Luke Gibbons	15553883

## QUESTIONS

A:



The screenshot shows a MySQL database management interface. At the top, the server is identified as 'mysql1.it.nuigalway.ie' and the database as 'mydb4561'. Below the server information, there are tabs for 'Structure', 'SQL', 'Search', 'Query', 'Export', and 'Imp'. A dropdown menu is open, showing the option 'Run SQL query/queries on database mydb4561:'. The main area displays the following SQL commands:

```
1 CREATE TABLE actor(  
2     aID int,  
3     fName varchar(255),  
4     surname varchar(255),  
5     gender char,  
6     CONSTRAINT actor_pk PRIMARY KEY (aID)  
7 );  
8  
9 CREATE TABLE stars(  
10    movieID int,  
11    actorID int,  
12    CONSTRAINT stars_pk PRIMARY KEY (movieID, actorID),  
13    CONSTRAINT stars_fk1 FOREIGN KEY (movieID) REFERENCES movie(id),  
14    CONSTRAINT stars_fk2 FOREIGN KEY (actorID) REFERENCES actor(aID)  
15 );
```

← Server: mysql1.it.nuigalway.ie » Database: mydb4561

Structure SQL Search Query E

Run SQL query/queries on database mydb4561: ?

```
1 INSERT INTO actor(aID, fName, surname, gender)
2 VALUES (1,'Christian','Bale','M'),
3 (2, 'Reese', 'Witherspoon','F'),
4 (3, 'Jared', 'Leto', 'M'),
5 (4,'Anthony','Perkins','M'),
6 (5,'Janet','Leigh','F'),
7 (6,'Henry','Fonda','M'),
8 (7, 'Kathy', 'Bates','F'),
9 (8,'William','Macy', 'M'),
10 (9,'Frances','McDormand','F'),
11 (10,'Steve','Buscemi','M'),
12 (11, 'Kate', 'Winslet', 'F'),
13 (12, 'Michael', 'Fassbender', 'M'),
14 (13, 'Angelina', 'Jolie', 'F'),
15 (14, 'Edward', 'Norton', 'M')
```

Clear Format Get auto-saved query

← Server: mysql1.it.nuigalway.ie » Database: mydb4561

Structure SQL Search Query E

Show query box

✓ 22 rows inserted. (Query took 0.0071 seconds.)

```
1 INSERT INTO stars(movieID, actorID)
2 VALUES (1,1),
3 (1,2),
4 (1,3),
5 (2,4),
6 (2,5),
7 (3,6),
8 (4,7),
9 (6,8),
10 (6,9),
11 (6,10),
12 (7,10),
13 (7,14),
14 (7,15),
15 (8,16),
16 (8,17),
17 (9,11),
18 (9,12),
19 (10,19),
20 (11,44),
21 (11,45),
22 (11,46),
23 (13,13)
```

☒ Enable foreign key checks

Go Cancel

## B:

Server: mysql1.it.nuigalway.ie » Database: mydb4561 » Table: movie

Browse Structure SQL Search Insert Export

✓ Showing rows 0 - 1 (2 total, Query took 0.0018 seconds.)

```
1 SELECT title, director, description, rating
2 FROM movie
3 WHERE (relYear = 2015 OR relYear = 2014) AND category = '12A'
```

☒ Enable foreign key checks

Go Cancel

☐ Show all | Number of rows: 25 | Filter rows: Search this table

+ Options

title	director	description	rating
Everest	Baltasar Kormákur	The story of New Zealand's Robert "Rob" Edwin Hall...	7.40
Still Alice		A linguistics professor and her family find their ...	7.50

## C:

Server: mysql1.it.nuigalway.ie » Database: mydb4561 » Table: movGenre

Browse Structure SQL Search Insert Export

✓ Showing rows 0 - 3 (4 total, Query took 0.0012 seconds.)

```
1 SELECT genre AS BladeRunner2049_Genres
2 FROM movGenre INNER JOIN movie ON movieID = id
3 WHERE title = "Blade Runner 2049"
```

☒ Enable foreign key checks

Go Cancel

☐ Show all | Number of rows: 25 | Filter rows: Search this table

+ Options

BladeRunner2049_Genres
Drama
Mystery
Sci-Fi
Thriller

**D:**

Server: mysql1.it.nuigalway.ie » Database: mydb4561 » Table: movie

Browse Structure SQL Search Insert Export

Showing rows 0 - 0 (1 total, Query took 0.0016 seconds.)

```
1 SELECT title, category
2 FROM movie
3 WHERE id = (SELECT movieID
4             FROM stars, actor
5             WHERE actorID = aID AND fName = "Michael" AND surname = "Fassbender")
```

☒ Enable foreign key checks

Go Cancel

☐ Show all | Number of rows: 25 ▼ Filter rows: Search this table

+ Options

title	category
Steve Jobs	15

**E:**

Server: mysql1.it.nuigalway.ie » Database: mydb4561 » Table: movie

Browse Structure SQL Search Insert Export

Showing rows 0 - 0 (1 total, Query took 0.0014 seconds.)

```
1 SELECT title, rating
2 FROM movie
3 WHERE rating = (SELECT MAX(rating)
4                 FROM movie)
```

☒ Enable foreign key checks

Go Cancel

☐ Show all | Number of rows: 25 ▼ Filter rows: Search this table

+ Options

title	rating
12 Angry Men	8.90

F:

← Server: mysql1.it.nuigalway.ie » Database: mydb4561

Structure

SQL

Search

Query

Export

Import

Operations

Routines

✓ Showing rows 0 - 1 (2 total, Query took 0.0027 seconds.)

1 SELECT title, relYear

2 FROM movie, stars, actor

3 WHERE director = "Angelina Jolie" OR (actorID = aID AND id = movieID AND fName = "Angelina" AND surname = "Jolie")

4 GROUP BY title, relYear

☒ Enable foreign key checks

Go

Cancel

☐ Profiling [ Edit ]

☐ Show all

Number of rows: 25 ▼

Filter rows:

+ Options

title	relYear
First They Killed My Father	2017
Maleficent	2014

G:

Server: mysql1.it.nuigalway.ie » Database: mydb4561 » Table: movGenre

Browse Structure SQL Search Insert Exp

Showing rows 1 - 14 (14 total, 240 rows excluded)

```
1 SELECT genre, count(genre) AS Times_Appeared_Since_2000
2 FROM movGenre INNER JOIN movie ON movieID = id
3 WHERE relYear >= 2000
4 GROUP BY genre
```

☒ Enable foreign key checks

Go Cancel

☐ Show all | Number of rows: 25 ▼ Filter rows: Search this table

+ Options

genre	Times_Appeared_Since_2000
Action	2
Adventure	3
Animation	1
Biography	3
Comedy	1
Crime	1
Drama	6
Family	1
History	1
Mystery	1
Sci-Fi	1
Thriller	2

H:

← Server: mysql1.it.nuigalway.ie » Database: mydb4561 » Table: actor

Browse

Structure

SQL

Search

Insert

Export

✓ Showing rows 0 - 0 (1 total, Query took 0.0016 seconds.)

1 SELECT fName, surname, count(aID)

2 FROM actor INNER JOIN stars ON aID = actorID

3 GROUP BY aID

4 HAVING count(aID) > 1

☒ Enable foreign key checks

Go

Cancel

☐ Show all

Number of rows: 25 ▼

Filter rows: Search this table

+ Options

fName	surname	count(aID)
Steve	Buscemi	2