Lab 4 – Databases and MySQL

How to login to your MySQL account:

1. Login to the **cmslamp14.aut.ac.nz** server using 'HeidiSQL_8.3_Portable' client, or 'MySQL Monitor Cmdline -x64 (only work for X64 Windows PC)' (Both tools are available in the 'Lab04 – Week 5' folder on AUTOnline).

2. To access your mysql account use the following parameters in HeidiSQL

   host: cmslamp14.aut.ac.nz
   user: <your AUTOnline username>
   password: <your AUTOnline password>

   or type "**mysql -h cmslamp14.aut.ac.nz -u <username> -p**"
   in a windows command line environment.

3. You will arrive at the 'MySQL Monitor' or mysql command line client (or similar tab in HeidiSQL):
   `mysql> …`

4. Each student has been allocated a database to work on, named as `your AUTOnline username, e.g., 'jiyu'.`

5. `mysql> SHOW DATABASES;`
   you will see a list of databases and your database is also in the list

6. `mysql> USE <username>';`
   You will receive a confirmation message "`Database changed`".

7. Now you are ready to create tables into your database.
   `CREATE TABLE cars .....;`

8. The MySQL manual can be found here: (Section 10 and 12 are what you need)
   http://dev.mysql.com/doc/refman/5.0/en/index.html *... or see week 4 lecture slides*

Task 1: Creating a table and entering data (5 marks)

Using your existing database, create a new table **cars** for a used car dealership.

Include the following fields in the **cars** table:
car_id (AUTO_INCREMENT PRIMARY KEY),
make,
model,
price, and
yom (year of manufacture).

Enter at least 10 records into the table.

Make	Model	Price	Year of Manufacture
Holden	Astra	$14,000	2005
BMW	X3	$35,000	2004
Ford	Falcon	$39,000	2010
Toyota	Corolla	$20,000	2010
Holden	Commodore	$13,500	2005
Holden	Astra	$8,000	2001
Holden	Commodore	$28,000	2009
Ford	Falcon	$14,000	2006
Ford	Falcon	$7,000	2003
Ford	Laser	$10,000	2001
Mazda	RX-7	$26,000	2000
Toyota	Corolla	$12,000	2001
Mazda	3	$14,500	2007

Task 2: Querying the table (5 marks)

Write queries that return the following:

1. All records
2. Make, model, and price, sorted by make and model
3. The make and model of the cars which cost $20,000 or more.
4. The make and model of the cars which cost below $15,000.
5. The average price of cars for a similar model. *Hint:* Use in-built SQL function AVG