

Lab 7: Access to MySQL database

Objectives:

- SQL Commands
- Accessing a database from a PHP using MySQLi
- Handling data in MySQL and PHP
- Review lecture content

Software: NotePad++, WinSCP, [phpMyAdmin](#), Chrome or Firefox (Windows)

Reference:

- Lecture Notes
 - [Php.net](#)
 - [MySQL Reference Manual](#)
 - <https://www.w3schools.com/sql/>
 - https://www.w3schools.com/php/php_ref_mysqli.asp
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1. Log on phpMyAdmin <https://sci-project.lboro.ac.uk:8080/phpMyAdmin/>

- username: coa123wuser
- password: grt64dkh
- database: coa123wdb

View structure and content of tables Country & Cyclist in database '**coa123wdb**'

2. Write query in phpMyAdmin "SQL" tab to search/display results from **coa123wdb** database: (you may also use "Search" tab to create the query easily)

- 1) Search for venues with capacity equal or more than 500, display all information about these venues. The result-set should look as below.

venue_id	name	capacity	weekend_price	weekday_price	licensed
5	Ashby Castle	1000	8000	7000	1
10	Southwestern Estate	500	4000	3000	0

- 2) Search for venue names ending with "Hotel", display relevant information. The result-set should look as below.

venue_id	name	capacity	weekend_price	weekday_price	licensed
2	Pacific Towers Hotel	250	3000	2400	1
8	Haslegrave Hotel	200	2000	1500	0

- 3) Search and display venues with weekend_price less than 3500 and capacity less than 260, sorted ascending by the "weekend_price" and descending by the "capacity" column. The result-set should look as below.

venue_id	name	weekend_price ▲ 1	capacity ▼ 2
6	Fawltly Towers	600	50
1	Central Plaza	2000	200
8	Haslegrave Hotel	2000	200
3	Sky Center Complex	2500	100
2	Pacific Towers Hotel	3000	250
7	Hilltop Mansion	3000	120

- 4) Find the number of venues and their average weekday_price. The result-set should look as below.

numberofvenues	averageprice
10	2375.0000

- 5) Using catering table, list the number of venues and their minimum cost in each grade. The result-set should look as below.

grade	numberofvenues	min(cost)
1	4	6
2	6	10
3	8	14
4	9	19
5	7	24

- 6) Select venue names, their capacity, their available grades of catering, and their catering cost (per person) for those venues that have capacity more than 200 and with grades of catering more than 3. You can achieve this by join search venue and catering tables. The result-set should look as below.

name	capacity	grade	cost
Ashby Castle	1000	4	26
Ashby Castle	1000	5	30
Southwestern Estate	500	4	22

- 7) Try to answer the following questions:

- Which are case sensitive in MySQL? table and field names, string values, SQL keywords
- Do they need in quote? Table name, field name, and string

3. Access MySQL using PHP

Download **getdata.php** from Learn this week lab, complete the tasks as indicated.