# COMPUTER PROGRAMING 1

### Lecture

Prepared by: Ms. Jhona D. Vallestero





## GOOD AFTERNOON! WELCOME TO OUR CLASS



"

## PRAYER



## Checking Of Attendance

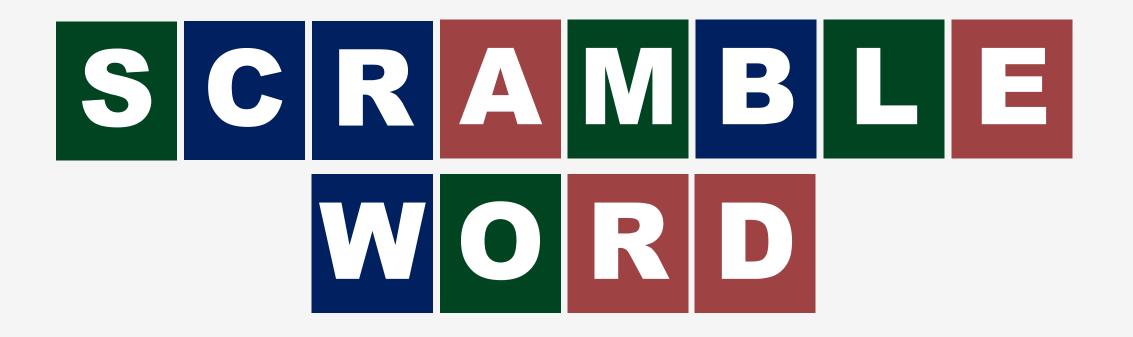


## Let us have a review!



## ESLBMACR DRW0

# SCRAMBLE WORD



Given the scrambled letters, the students must unscramble the letter and form a real word.





## DATA

## ARGESOT

## STORAGE



## ONITCONKE

## CONNECTION



## PROGRAM

## S L T I Q E

## SQLITE

D A T A S T O R A G E CONNECTION P R O G R A M Q L I T E

## DATABASE CONNECTION



# COMPUTER PROGRAMMING 1

## How to install SQLite?



#### Open the download page:

https://www.sqlite.org/download.html

#### Precompiled Binaries for Windows

sqlite-dll-win32-x86- 32-bit DLL (x86) for SQLite version 3.29.0.

3290000.zip (sha1: 00435a36f5e6059287cde2cebb2882669cdba3a5)

(474.63 KiB)

sglite-dll-win64-x64- 64-bit DLL (x64) for SQLite version 3.29.0.

3290000.zip (sha1: c88204328d6ee3ff49ca0d58cbbee05243172c3a)

(788.61 KiB)

sqlite-tools-win32- A bundle of command-line tools for managing SQLite database files, including the

x86-3290000.zip command-line shell program, the sqldiff.exe program, and the

(1.71 MiB) sqlite3 analyzer.exe program.

(sha1: f009ff42b8c22886675005e3e57c94d62bca12b3)

2

Create a new folder e.g., C:\sqlite

3

Extract the content of the file that you

downloaded to the C:\sqlite folder.



Open the command line window

and navigate to the C:\sqlite folder:

```
C:\cd c:\sqlite
```

C:\sqlite>



Then type the sqlite3 and press enter,

you should see the following:

```
C:\sqlite>sqlite3

SQLite version 3.29.0 2019-07-10 17:32:03

Enter ".help" for usage hints.

Connected to a transient in-memory database.

Use ".open FILENAME" to reopen on a persistent database.

sqlite>
```

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Install SQLite GUI Tool: DB Browser for SQLite:



Downloads - DB Browser for SQLite

(sqlitebrowser.org)

## Connecting the database SQLite in Python File / Program

```
import sqlite3
def exe(para,data):
    conn = sqlite3.connect('StudentData.db')
    if data == None:
        cursor = conn.execute(para)
    else:
        cursor = conn.execute(para,data)
    rows = cursor.fetchall()
    conn.commit()
    cursor.close()
    return rows
```

## ACTIVITY



### ACTIVITY

**Direction**: Given the table from a database and a query, write what will be the result once we execute the query.

id	name	year
Filter	Filter	Filter
STDNT-12345	Bruno Mars	4th Year
STDNT-4567	Avril Lavigne	2nd Year
STDNT-1010	Taylor Swift	3rd Year
STDNT-7362	Anson Seabra	1st Year

	id	name	year
	Filter	Filter	Filter
1	STDNT-12345	Bruno Mars	4th Year
2	STDNT-4567	Avril Lavigne	2nd Year
3	STDNT-1010	Taylor Swift	3rd Year
4	STDNT-7362	Anson Seabra	1st Year
5	STDNT-2121	Ariana Grande	4th Year

4	

	id	name	year
	Filter	Filter	Filter
1	STDNT-12345	Bruno Mars	4th Year
2	STDNT-4567	Avril Lavigne	2nd Year
3	STDNT-7362	Anson Seabra	1st Year

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	id	name	year ▲¹
	Filter	Filter	Filter
1	STDNT-12345	Celine Dion	3rd Year
2	STDNT-1010	Taylor Swift	3rd Year
3	STDNT-4567	Avril Lavigne	2nd Year
4	STDNT-7362	Anson Seabra	1st Year



id STDNT-12345

name ..... Mar

Bruno Mars

year

4th Year





1. TRUE 6. TRUE

2. TRUE 7. FALSE

3. FALSE 8. FALSE

4. FALSE 9. FALSE

5. TRUE 10. TRUE

- ☐ Create a python program with the integration to GUI and database. The program should have one (1) lineEdit, one (1) combo box, one (1) tableWidgets, 3 (three) buttons for ok/submits/insert/save, delete/erase, and update. The data to be entered is depends on the student. Any data is accepted as well as it do not have a foul words.
- ☐ Create a video of you while you are using your created program and explaining its code. You are required to show your face in the screen while you are presenting.

### ASSIGNMENT

#### **Deadline and Submission:**

- Submission is on next meeting, Thursday, <u>December 14</u>, 2023, <u>until 11:59 am only</u>.
- Submit your file in <u>.zip format</u> and name it <u>SURNAME\_DATABASE</u>.
- Included in the zip file are the <u>.py, .ui, .db and .mp4</u>.

### ADVANCE ASSIGNMENT

**Direction**: Search, read and try other commands of SQLite such as:

- CREATE
- **❖** ALTER
- DROP

### REFERENCES

- https://www.oracle.com/ph/database/what-is-database/
- https://www.tutorialspoint.com/sqlite/sqlite\_overview.htm
- https://www.sqlitetutorial.net/?fbclid=IwAR3oURJ4Ru8HXFAZ3i

fSXuzfbK-h\_ZDBetsuyfuAepuZvQ6BFKGvUMT\_pzI

# Thank You Listening