BASIC COMMANDS

USING THE SHELL	
Prompt:	`username@host-name:~/currentDir`
Command Syntax:	`[command] [options] [arguments]`

Example: Command **echo** outputs argument "Hi"
Example: Command **ls** used with option -a
	`echo "Hi"`
	`ls -a`

View documentation for a command	`man` *command*
Send output of command as input to another	*output_command* | *input_command*
Command substitution	`` `command` ``

Example: Outputs 'hello ls'
Example: Outputs 'hello' and result of ls command
	`echo hello ls`
	`` echo hello `ls` ``

Clear the terminal	`clear`
DIRECTORIES: MOVING AROUND	
Print working directory	`pwd`
Move to a new directory	`cd` *NewDirectoryName*
Move to home directory	`cd`
Move up a directory	`cd ..`
Absolute path: From root to dir1	`/Users/anita/courses/dir1`
Relative path: From current directory to dir1	`./courses/dir1`
Root directory	`/`
Home directory	`~`
Current directory	`.`

LISTING FILES AND DIRECTORIES	
List all files & directories in the current directory	`ls`

Options:
`-l` (Long listing): includes permissions & information
`-a` (All): includes hidden files & folders (.file)
Multiple options:
	`ls -l`
	`ls -a`
	`ls -la`

List files in a specific directory (relative filepath)	`ls` *`DirectoryToList`*
CREATING, MOVING & DELETING DIRECTORIES	
Create new directory	`mkdir` *`NewDirName`*
Move a directory	`mv` *`ToMove NewLocation`*
Example: Move documents up a directory	`mv documents ../`
Delete a directory (Recursively delete all contents)	`rm -r` *`DirectoryToDelete`*
CREATE & INSPECT FILES	
Create a new empty file	`touch` *`newfile`*
Example: Create new empty SQL file	`touch MyDatabase.sql`
Open nano editor to create or edit files	`nano` *`filename`*
Create or overwrite file with “NewText”	`echo "NewText" >` *`filename`*
Append “NewText” to end of a file	`echo "NewText" >>` *`filename`*
Send output of command to file	`echo` *`command`* `>` *`filename`*
Example: Write contents of directory to list.txt	`echo ls > list.txt`
Display number of lines, words, and characters	`wc` *`filename`*
Display file text to the console	`cat` *`filename`*
View first N lines of a file	`head -N` *`filename`*
View last N lines of a file	`tail -N` *`filename`*
Delete file	`rm` *`filename`*

CREATING A DATABASE

ON THE COMMAND LINE	
Download SQLite	`sudo apt install sqlite3`
Create database	`sqlite3` *`DatabaseName.db`*
Read an SQL File	`.read` *`FileToRead.sql`*
Example: Runs commands in Restaurant.sql	`.read ../data/Restaurant.sql`
USING PYTHON	
Import sqlite3 library	`import sqlite3 as sq`
Connect to database (or create new database)	`connection = sq.connect("name.db")`
Create cursor to access database	`cursor = connection.cursor()`
Execute command	`cursor.execute(`*`command`*`)`
Access rows returned by query	`rows = cursor.fetchall()`
Access single row returned by query	`row = cursor.fetchone()`

Example:
Gets all results from tablename (variable holding the name of the table) and iterates through the rows, printing them
	`cursor.execute("SELECT * FROM " + tablename)`
	`rows = self.cur.fetchall()`
	`for row in rows:`
	`    print(row)`