Python Day 6 – Flask + MySQL

1. What is SQL?

2. Based on the data given, draw the associated ERD diagram:

id	name	birthday	deathday
1	Pablo Picasso	1881-10-25	1973-04-08
2	Vincent van Gogh	1853-03-30	1890-07-29
3	Jackson Pollock	1912-01-28	1956-08-11
4	Frida Kahlo	1907-07-06	1954-07-13

id	title	year	artist_id
1	The Two Fridas	1939	4
2	The Starry Night	1889	2
3	Guernica	1937	1
4	The Old Guitarist	1904	1
5	Autumn Rhythm	1950	3
6	One	1950	3
7	The Potato Eaters	1885	2

3. Using the data to the left, write queries to:

   -get all the artists

   -get all the works, ordered by their creation year

   -get all the artists who were born during the 19th century (January 1, 1801 – December 31, 1900)

   -get all the works that start with “The”

   -add the artist Leonardo da Vinci (April 15, 1452 – May 2, 1519) (or your own favorite artist)

   -add *Mona Lisa* (1503), which was painted by da Vinci

   -update the title *Autumn Rhythm* to *Autumn Rhythm (Number 30)*

   -remove Jackson Pollock from the database

   -list all the works of art, with their associated artist

4. What does the PyMySQL package do for us?

5. Assuming I have the correct files and database (schema name is 'art') set up, complete the file below:

```
from flask import Flask, render_template
from mysqlconnection import connectToMySQL

app = Flask(__name__)

@app.route("/")
def index():
   # this route should show all the artists
   db = connectToMySQL('_____') # make a connection to the db
   all_artists =

   return render_template("index.html", artists=_____________)

@app.route("/artists/<id>")
def show_artist(____):
   # this route should display the single artist's information
   # this route should show all the artists

   # BONUS: also display all the artist's works of art


   return render_template("artist.html",                          )

if __name__ == "__main__":
   app.run(debug=True)
```