

IT-566

# Computer Scripting Techniques

```
start_date = self.get_monday(start_date)
date_span = end_date - start_date
week_color = start_color
day_color = start_color
market_color = start_color.value

for i in range(1, date_span.days):
    if start_date.weekday() == 0:
        week_color = day_color
    item = self.set_historical_week_colors(self, start_date, end_date, start_color, debug=False, insert=False)
    market_event_name = MarketWeekEvent(self, week_color_name=week_color, day_color_name=day_color.name)

    if self._insert == True:
        self._market_color_generator.put(item)

    if self._debug == True:
        print(json.dumps(item))

    if day_color.value < 4:
        day_color = MarketColor(day_color.value + 1)
    else:
        day_color = MarketColor.RED
    start_date += timedelta(days=1)

def generate_historic_market_colors(self, start_date, end_date, start_color, debug=False, insert=False):
    items = self.generate_historic_dates_and_day_colors(start_date=start_date, end_date=end_date, start_color=start_color)
    market_data_items = self.set_historical_week_colors(items)
    if insert == True:
        self.insert_items(market_data_items)
    return market_data_items
```

# Week 7

## Talking Points

Intro to Database  
Programming

MySQL  
MAMP & phpMyAdmin

Database Scripts

Python MySQL Connector





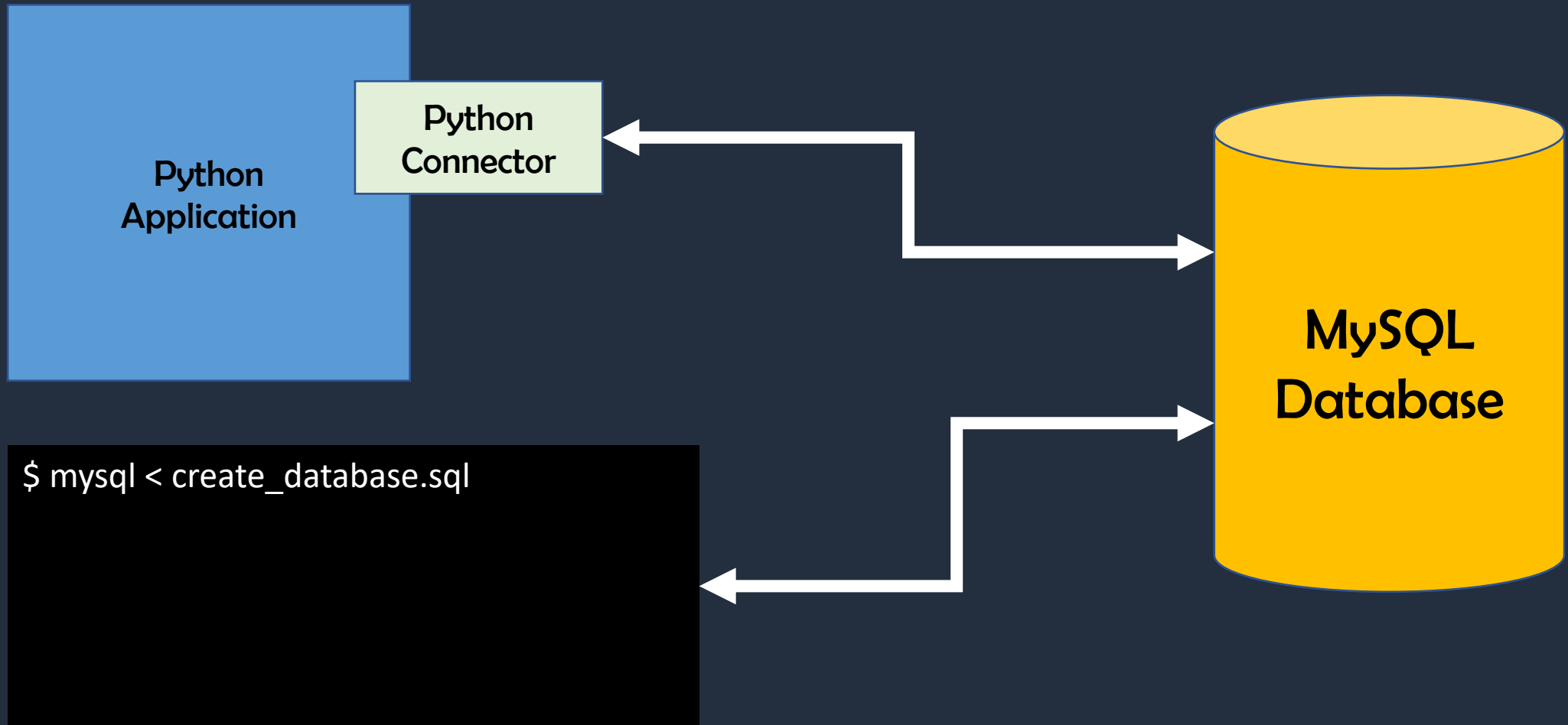
Database  
Programming  
is Cool!



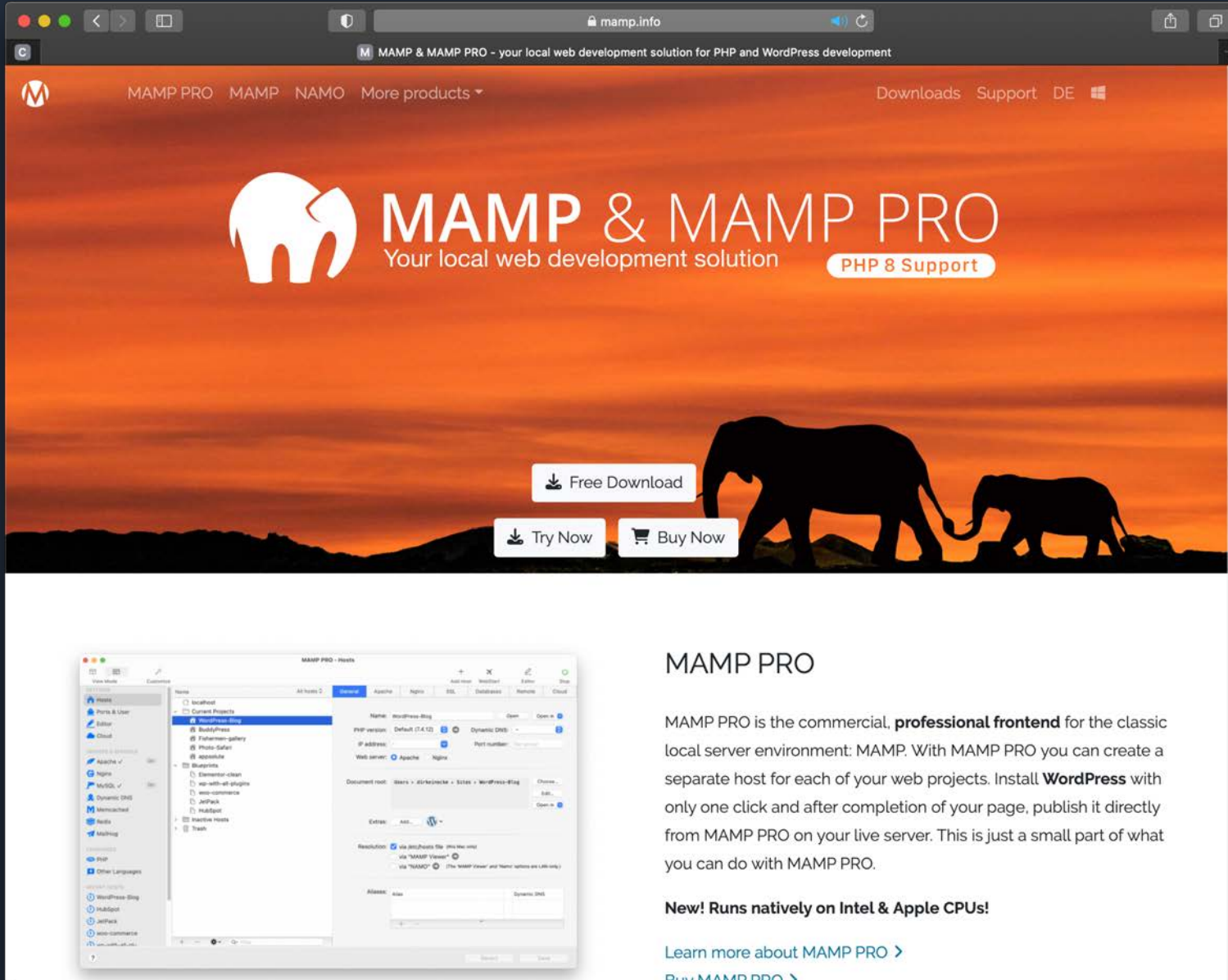
# Introduction to Database Programming

- What Is A Database?
- Different Types Of Databases...
  - Flat File
    - Plain text records in a file
  - Hierarchical
    - Parent/Child
  - **SQL/Relational**
    - Collection of tables
    - Seeks to minimize data redundancy
  - NoSQL
    - Speed at the cost of repetitive data
  - Graph
    - Elements connected by finite number or relations

# Introduction to Database Programming



# MAMP



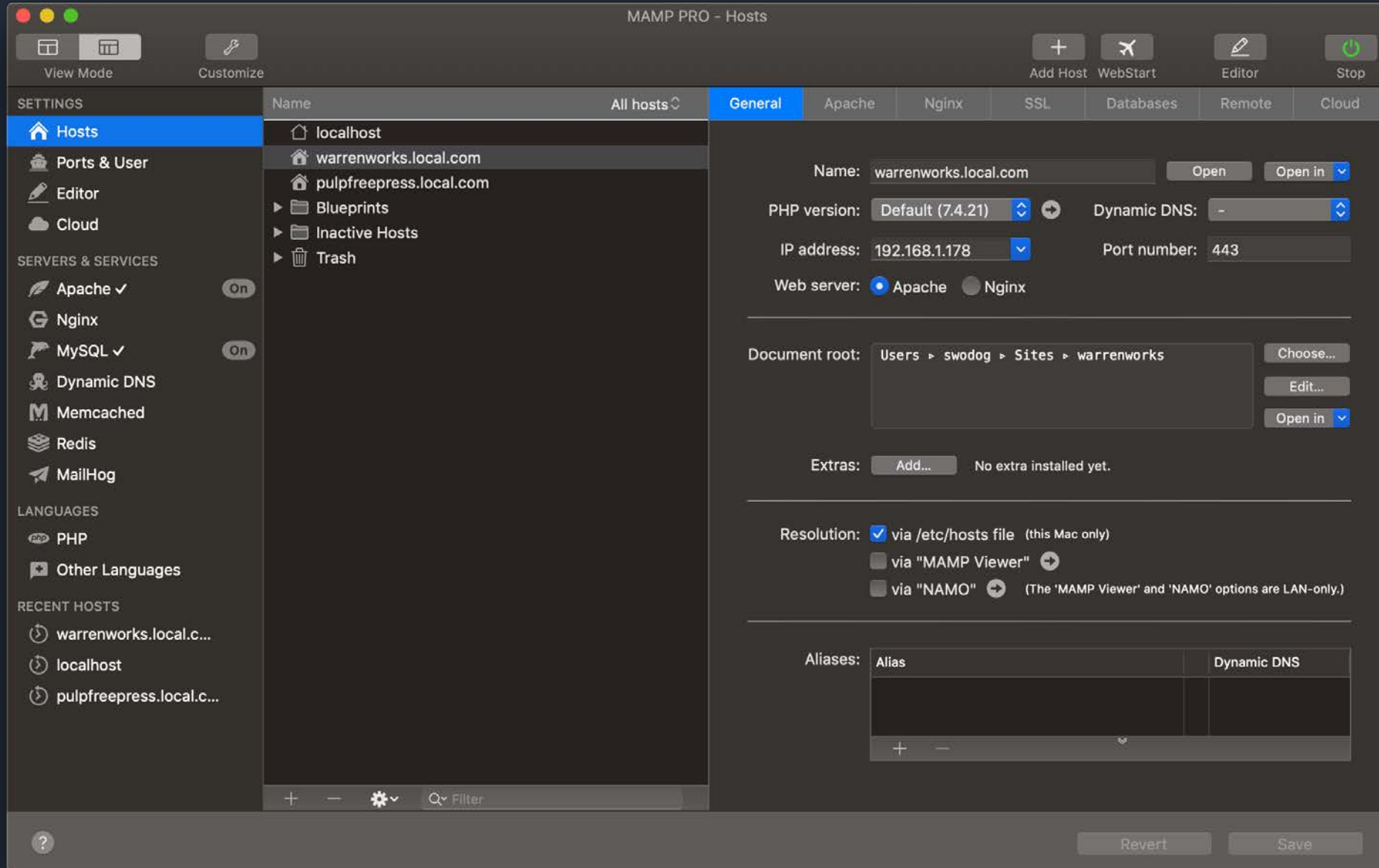
The image shows a screenshot of the MAMP & MAMP PRO website in a web browser. The website has a dark orange header with the MAMP logo and navigation links. The main content area features a large white elephant logo and the text "MAMP & MAMP PRO Your local web development solution PHP 8 Support". Below this, there are buttons for "Free Download", "Try Now", and "Buy Now". The background of the website is a sunset scene with silhouettes of elephants. In the bottom left corner, there is a screenshot of the MAMP PRO application interface, which shows a sidebar with various tools and a main panel with settings for a new project.

<https://mamp.info>

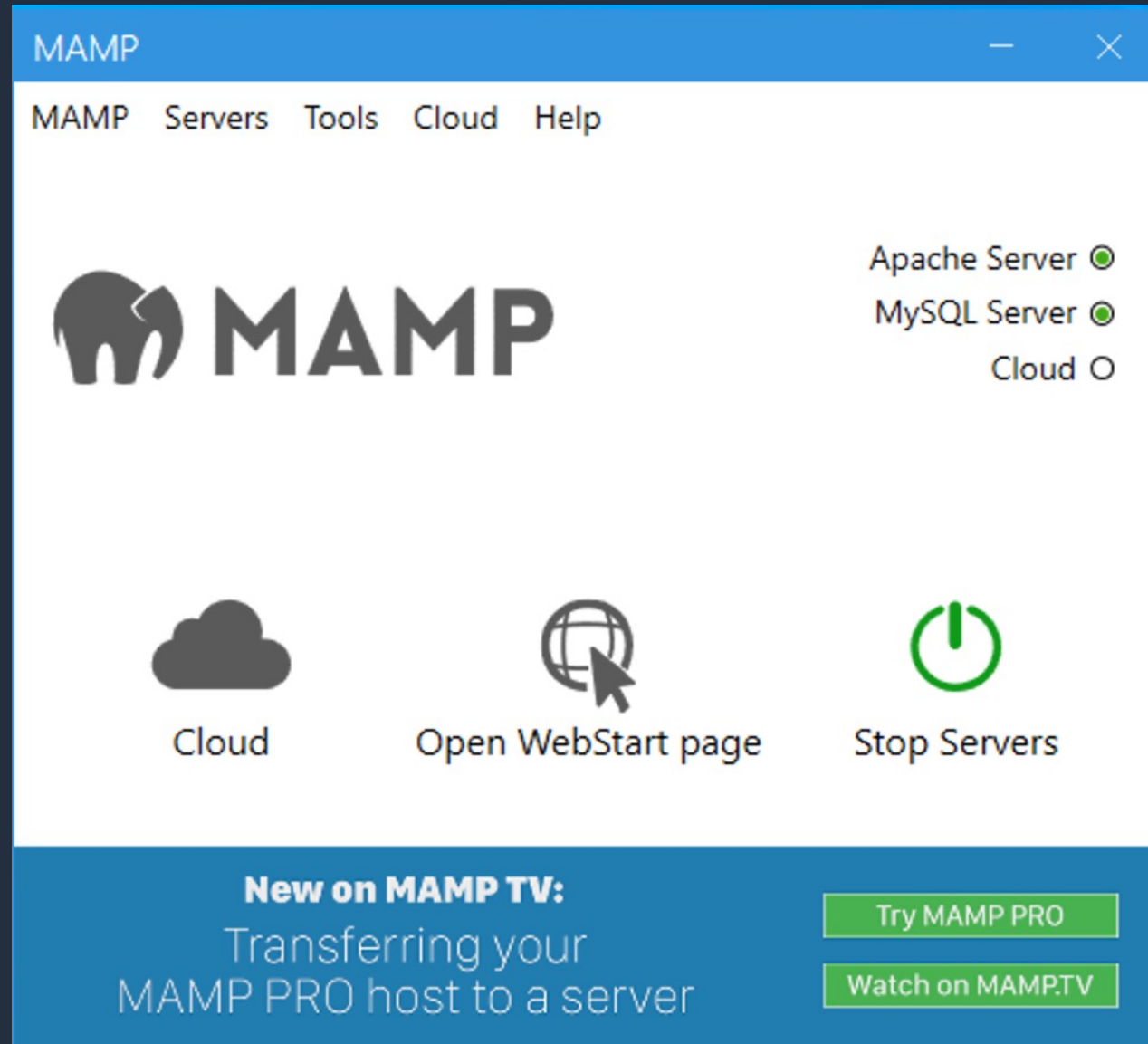
MacOS  
Apache  
MySQL  
PHP | Python

Installs MySQL plus  
Apache and  
phpMyAdmin, which is a  
browser-based MySQL  
administration GUI

# MAMP PRO (MacOS)



# MAMP (Windows)





# phpMyAdmin

localhost:8888 / localhost / home\_inventory / items | phpMyAdmin 5.1.0

Server: localhost:8889 » Database: home\_inventory » Table: items

Showing rows 0 - 8 (9 total, Query took 0.0004 seconds.)

```
SELECT * FROM `items`
```

Profiling [ Edit inline ] [ Edit ] [ Explain SQL ] [ Create PHP code ] [ Refresh ]

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

+ Options

				id	item	count
<input type="checkbox"/>	Edit	Copy	Delete	1	Truck	1
<input type="checkbox"/>	Edit	Copy	Delete	2	MacBook Pro	1
<input type="checkbox"/>	Edit	Copy	Delete	3	Table	1
<input type="checkbox"/>	Edit	Copy	Delete	4	Car	1
<input type="checkbox"/>	Edit	Copy	Delete	5	Chair	1
<input type="checkbox"/>	Edit	Copy	Delete	6	China Cabin	1
<input type="checkbox"/>	Edit	Copy	Delete	7	Sofa	1
<input type="checkbox"/>	Edit	Copy	Delete	9	Baseball	1
<input type="checkbox"/>	Edit	Copy	Delete	10	Toad Stool	2

Check all | With selected: Edit Copy Delete Export

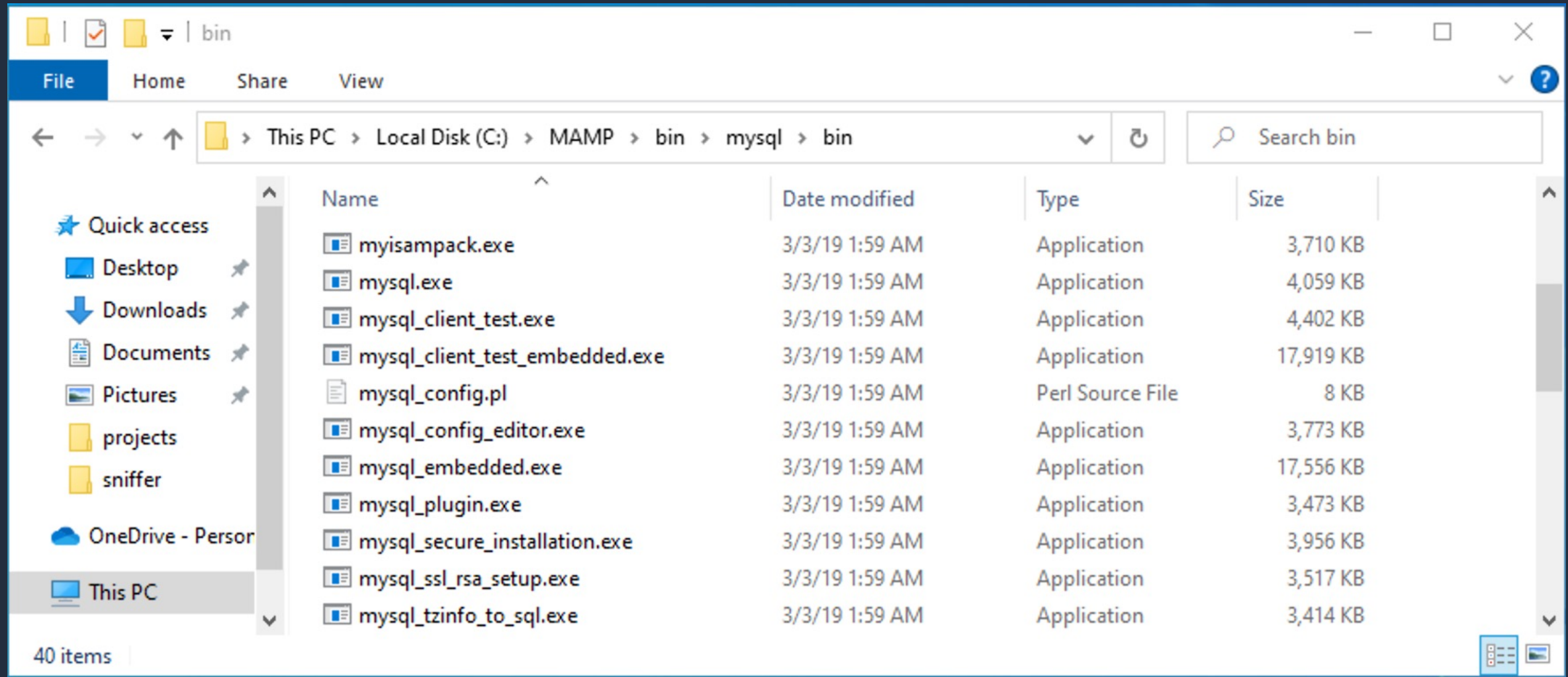
Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Query results operations

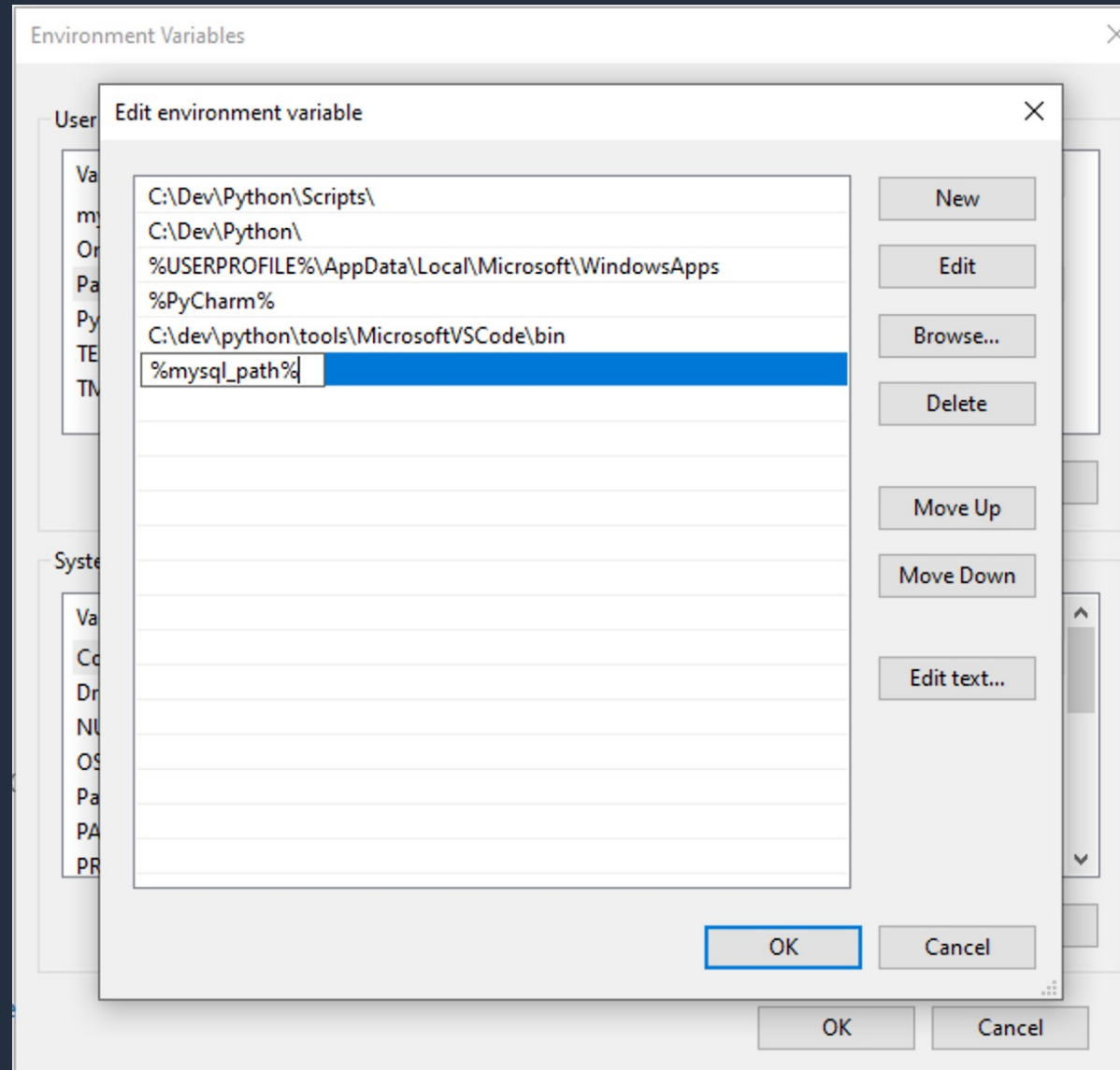
Print Copy to clipboard Export Display chart Create view

Console

# Copy Path to mysql.exe...



# Add Path to Environment Variables





# Try to connect...