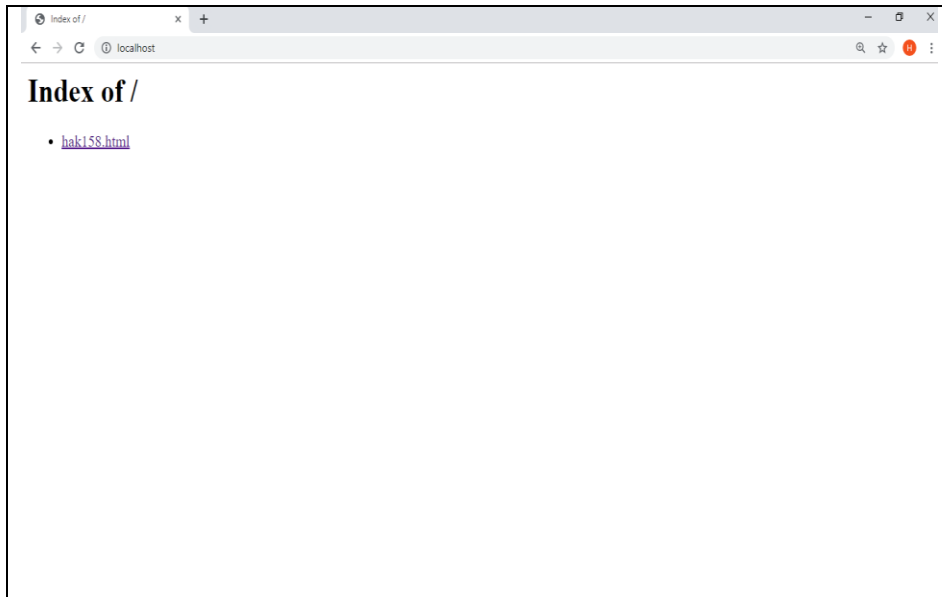


## How to Run the Web Application on Localhost

- Download Apache, MySQL and Python onto your PC, accepting the default settings. The default user name is 'root', host is 'localhost', port number is 3306. Create the mentioned database with name 'SupplyDB' with MySQL with the exact schema and data given in the specification.
- A account with user name 'proj' and password 'proj' has been created for the purpose of this project.
- From the files provided, open all the Python files (query1.py, query2.py etc.) and check if the path in the first line matches with the path where python is installed and change it if it's different from the user computer.
- Install MySQL driver from python. Open up python command and type  
*python -m pip install mysql-connector*
- Now, copy and paste the hak158.html file in the 'htdocs' subdirectory within the Apache directory tree.
- And copy and paste all 5 python files (named query1.py, .. , query5.py) in the 'cgi-bin' sub-directory tree within the Apache directory tree.
- Make sure apache server is running. Go to the 'bin' sub-directory in the 'Apache' directory, and click 'ApacheMonitor'. Then click 'start' to start apache server if not already done.
- Also, make sure MySQL server is running. Search 'services' in windows run and open it. Under 'Services' locate MYSQL80 (version may be different) and make sure it is running. If not running, right click on it and hit start.
- Now, go to a web browser and write "<http://localhost>", and it will show the hak158.html link. Click 'hak158.html' to get access to the database queries.

## Screenshots of the Project Run

1. When typed <http://localhost> on the web browser, it will show [hak158.html](#) link.



2. When [hak158.html](#) is clicked the page with all the queries will show up

Database Project

localhost/hak158.html

Project COMP - 4754

Query 1: Given the name of a part, retrieve the information about each supplier who supplied it. This information can be any subset of the supplier's id, supplier's name, address, and the cost the supplier charged for that part.

Please enter a valid parts name for "Query 1"

Submit

Query 2: Given the cost, retrieve the names of the suppliers who have ever supplied a part with that cost or higher.

Please enter a cost for "Query 2"

Submit

Query 3: Given the pid, retrieve the names and addresses for the suppliers who charge the most for that part.

Please enter a pid for "Query 3"

Submit

Query 3: Given the pid, retrieve the names and addresses for the suppliers who charge the most for that part.

Please enter a pid for "Query 3"

Submit

Query 4: Given the color and address, retrieve the names of the parts with that color which were supplied by all the suppliers in the given address.

Please enter a parts color and then a valid address for "Query 4"

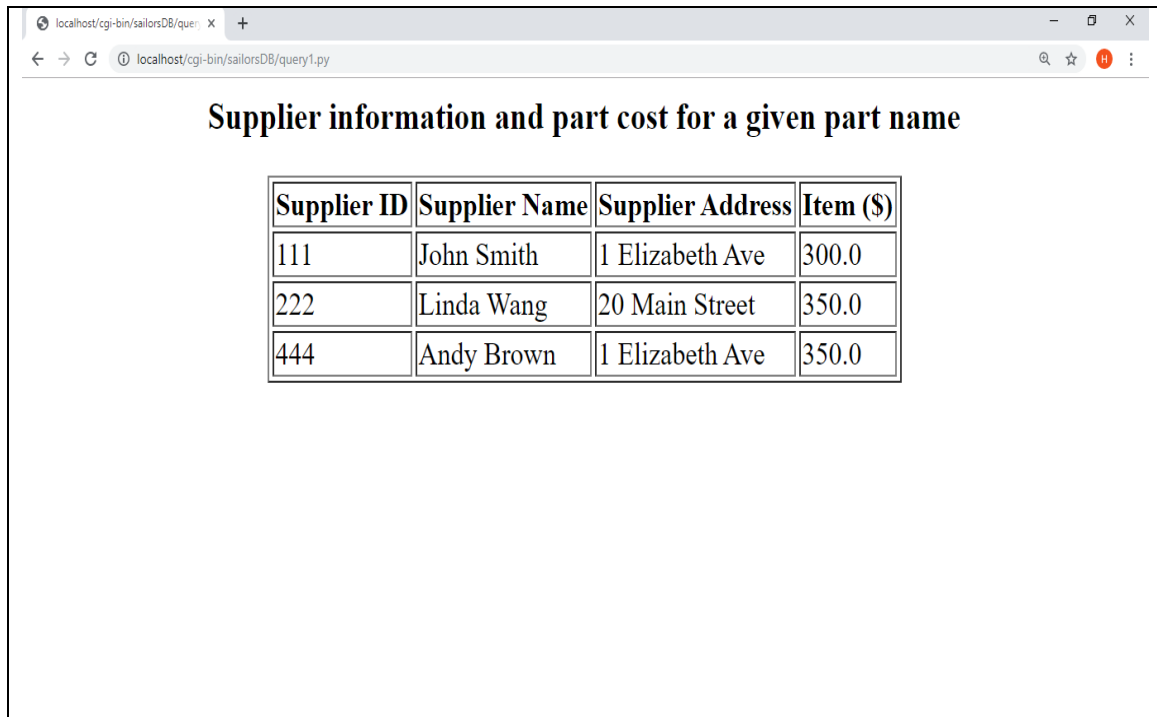
Submit

Query 5: Given the address, retrieve the sids and names of the suppliers in that address who do not supply any part.

Please enter a valid address for "Query 5"

Submit

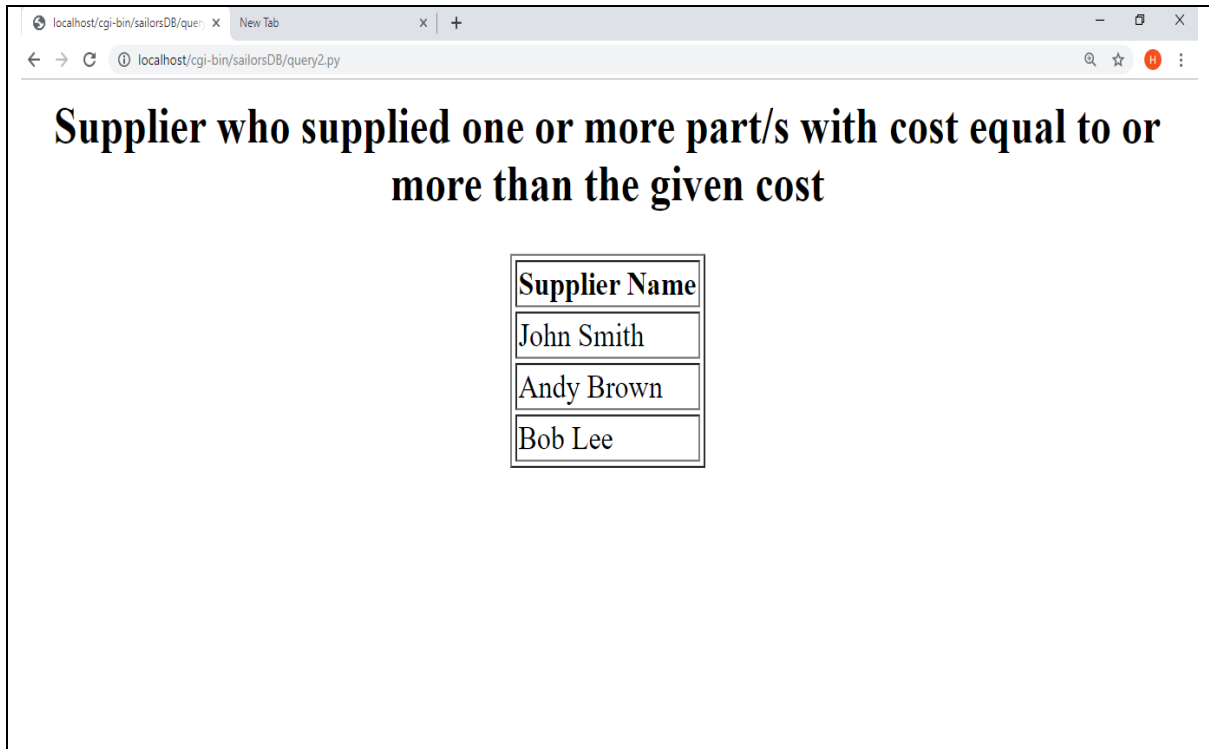
3. For the first query at <http://localhost/hak158.html>, please input a valid part's name. This screenshot is taken after putting "Mother Board" as the parts name and then hitting submit. It will then show the supplier ID, supplier name, supplier address, and cost of the part supplied by the particular supplier.



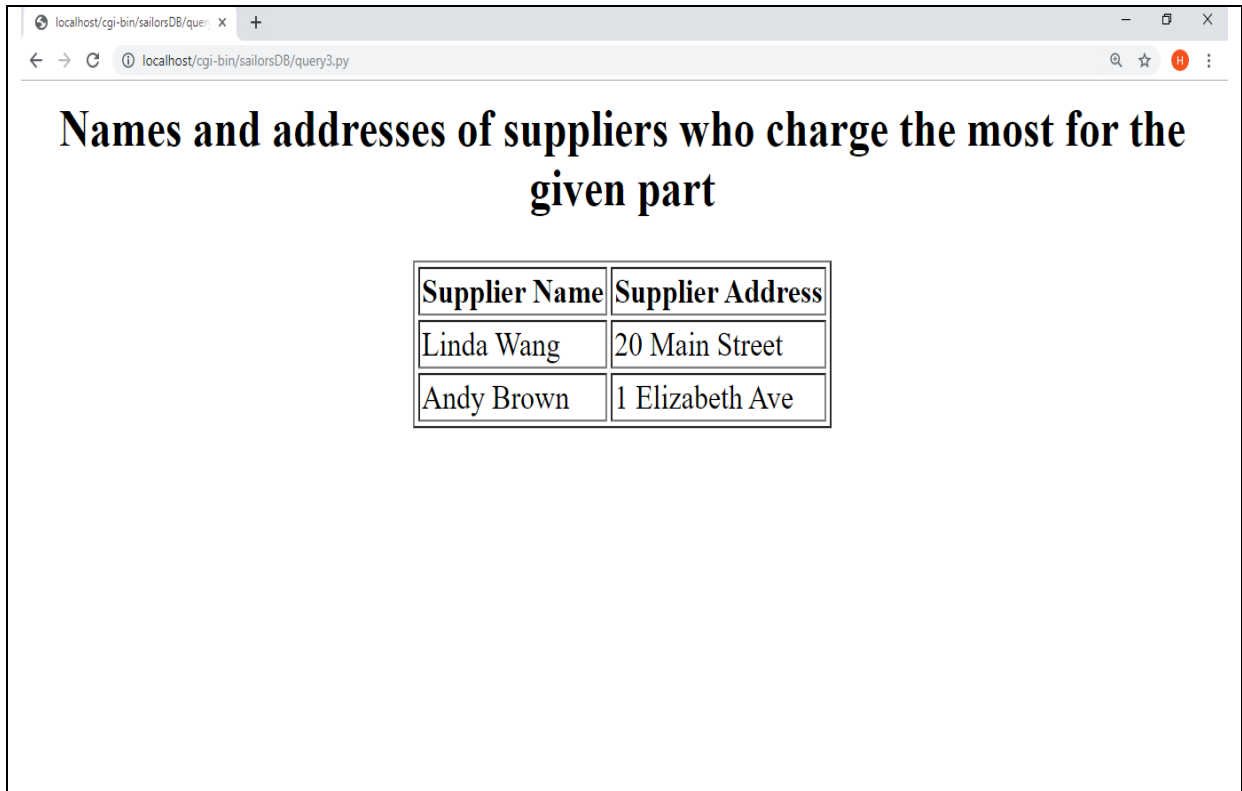
The screenshot shows a web browser window with the address bar displaying `localhost/cgi-bin/sailorsDB/query1.py`. The page title is "Supplier information and part cost for a given part name". Below the title is a table with four columns: "Supplier ID", "Supplier Name", "Supplier Address", and "Item (\$)". The table contains three rows of data.

Supplier ID	Supplier Name	Supplier Address	Item (\$)
111	John Smith	1 Elizabeth Ave	300.0
222	Linda Wang	20 Main Street	350.0
444	Andy Brown	1 Elizabeth Ave	350.0

4. For the second query at <http://localhost/hak158.html>, please input a cost. This screenshot is taken after putting “360” as the cost and then hitting submit. It will then show the supplier names who supplied one or more part/s with cost equal to or more than the given cost



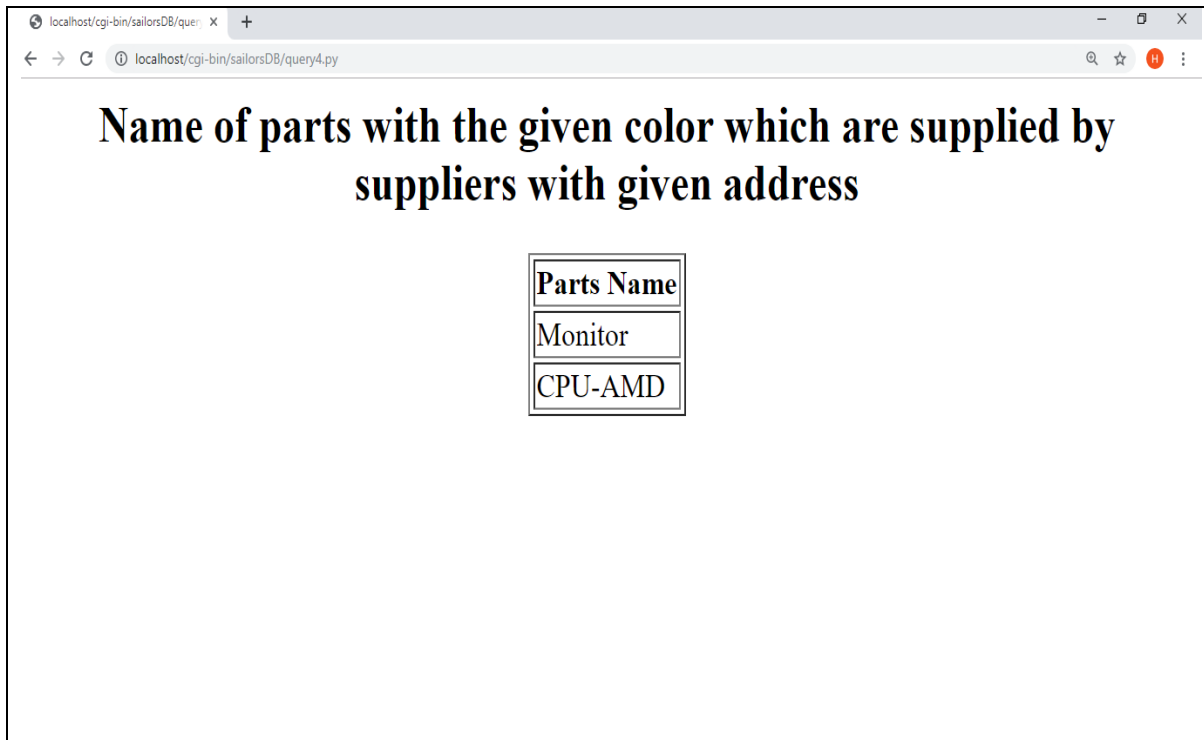
5. For the third query at <http://localhost/hak158.html>, please input a valid pid. This screenshot is taken after putting “P1” as the pid and then hitting ‘submit’ button——. It will then show the names and addresses of suppliers who charge the most for the given part.



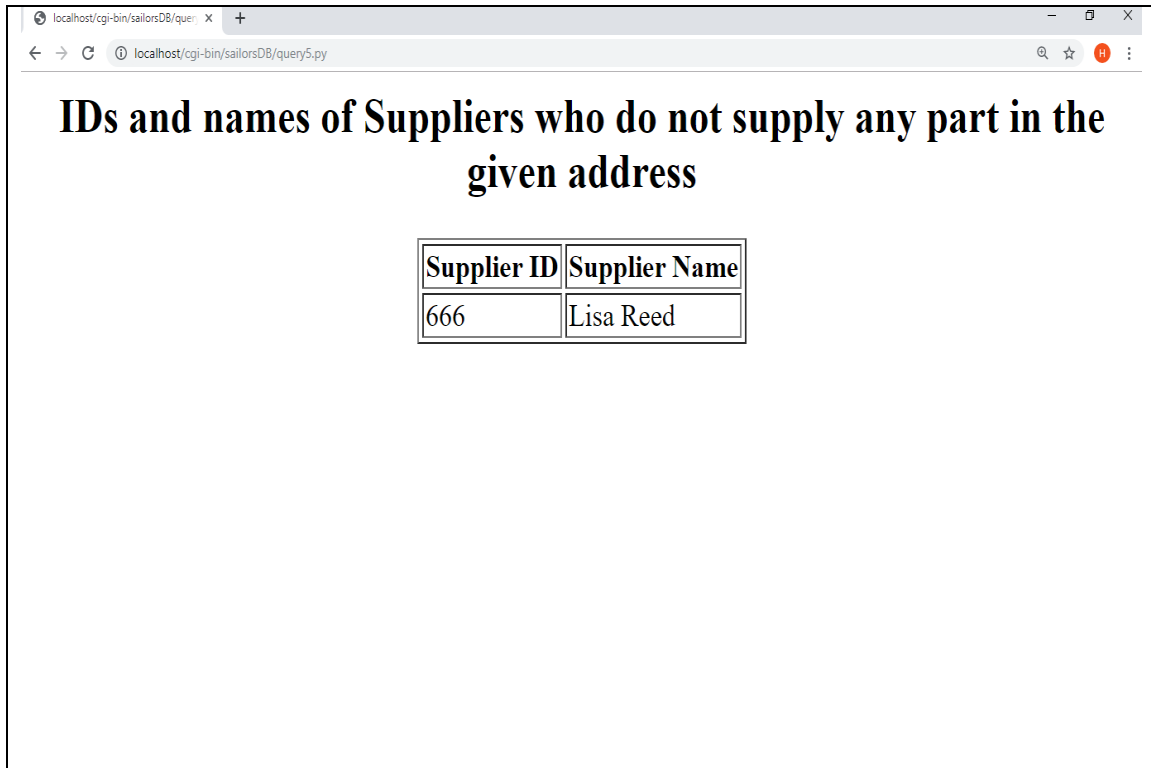
The screenshot shows a web browser window with the address bar displaying `localhost/cgi-bin/sailorsDB/query3.py`. The page content is as follows:

Names and addresses of suppliers who charge the most for the given part	
Supplier Name	Supplier Address
Linda Wang	20 Main Street
Andy Brown	1 Elizabeth Ave

6. For the fourth query at <http://localhost/hak158.html>, please input a part's color and a valid address. This screenshot is taken after putting "white" as the color and "1 Elizabeth Ave" as the address and then hitting submit. It will then show the name of parts with the given color which are supplied by suppliers with given address



7. For the fifth query on <http://localhost/hak158.html>, please input a valid address. This screenshot is taken after putting “10 Governor Road” as the address and then hitting submit. It will then show the IDs and names of Suppliers who do not supply any part in the given address.



IDs and names of Suppliers who do not supply any part in the given address

Supplier ID	Supplier Name
666	Lisa Reed