**Question 1:** How do you inspect all environment variables in Python?

- 1) By using os.environ to inspect all environment variables in python. Like items() module, this will return a list of key-value pairs representing all the environment variables. Or get() moudle to access the value of an environment variable in Python.
- **Question 2:** What environment variable contains the query parameter data?
- 2) print(json.dumps(dict(os.environ.get('QUERY\_STRING')), indent=2)) This will make a CGI script serve the environment variables as JSON. The QUERY\_STRING environment variable contains the query parameter data.
- **Question 3:** What environment variable contains information about the user's browser?
- 3) The HTTP\_USER\_AGENT environment variable contains information about the user's browser.
- Question 4: How does the POSTed data come to the CGI script?
- 4) In a CGI script, the data is sent by the HTTP POST request. This data is typically in the form of key-value pairs that are encoded in the request body.

**Question 5:** What is the HTTP header syntax to set a cookie from the server?

5) From lab3 login.py:

[if form ok:

print(f"Set-Cookie: username={username}")

print(f"Set-Cookie: password={password}")]

This will be the syntax to set a cookie from the server.

**Question 6:** What is the HTTP header syntax the browser uses to send the cookie back?

- 6) Cookie: <cookie-name1>=<cookie-value1>;...etc.
- Question 7: In your own words, what are cookies used for?

  7) cookies is use for save the information about our device that we need to connect with some webserver. It will keep try to say "hello" to the server all the time to make sure it still remember us. It also have many other purposes such as tracking amd authentication etc.
- Question 8: What is the link to your code on GitHub?
  - 8) https://github.com/PAULbigBA/cgi-lab.git