

# **Network Programming**

## **Assignment 4**

### **Execution results**

**20182705**

**빙기범**

1.

## Server

```
(npEnv) C:\Users\kibum\work\network_programming\assignment_4>python problem1_server.py
* Serving Flask app 'problem1_server' (lazy loading)
* Environment: production
  WARNING: This is a development server. Do not use it in a production deployment.
  Use a production WSGI server instead.
* Debug mode: on
* Running on http://127.0.0.1:8000 (Press CTRL+C to quit)
* Restarting with stat
* Debugger is active!
* Debugger PIN: 104-210-058
127.0.0.1 - - [08/Jun/2022 16:23:45] "POST / HTTP/1.1" 200 -
127.0.0.1 - - [08/Jun/2022 16:24:16] "POST / HTTP/1.1" 200 -
127.0.0.1 - - [08/Jun/2022 16:24:25] "POST / HTTP/1.1" 200 -
127.0.0.1 - - [08/Jun/2022 16:24:43] "POST / HTTP/1.1" 200 -
```

## Client

```
(npEnv) C:\Users\kibum\work\network_programming\assignment_4>python problem1_client.py
Input key: WWW
The definition of WWW:
The World Wide Web (WWW), commonly known as the Web, is the world's dominant software platform. It is an information space where documents and other web resources can be accessed through the Internet using a web browser.

(npEnv) C:\Users\kibum\work\network_programming\assignment_4>python problem1_client.py
Input key: POST common method
The definition of POST common method:
The POST method requests that the target resource process the representation enclosed in the request according to the semantics of the target resource. It is used when the client wants to submit new data to the server.

(npEnv) C:\Users\kibum\work\network_programming\assignment_4>python problem1_client.py
Input key: JSON
The definition of JSON:
JSON is an open standard file format and data interchange format that uses human-readable text to store and transmit data objects consisting of attribute-value pairs and arrays (or other serializable values). It is a common data format with diverse uses in electronic data interchange, including that of web applications with servers.

(npEnv) C:\Users\kibum\work\network_programming\assignment_4>python problem1_client.py
Input key: Cookies
The definition of Cookies:
HTTP cookies are small blocks of data created by a web server while a user is browsing a website and placed on the user's computer or other device by the user's web browser. Cookies are placed on the device used to access a website, and more than one cookie may be placed on a user's device during a session.
```

2.

1	Ajit Kumar,2020,NA,"Information security, Malware, Machine learning, Smart grid security, Privacy preserving ML",NA, <a href="https://www.google.com/url?q=https%3A%2F%2Fdrajitkum">https://www.google.com/url?q=https%3A%2F%2Fdrajitkum</a> 20 ^ v i
2	Sneha Kanchan,2021,NA,"Information security, Cryptography, Group signature, Federated learning",NA,NA
3	Saqib Kazmi,2019,NA,Distributed intelligent energy network.,NA,NA
4	Mazhar Ali,2021,NA,NA,NA,NA
5	Ankit Kumar Singh,2021,NA,NA,NA,NA
6	Abrar Ahmed,2021,NA,NA,NA,NA
7	Jun Yong YOON,2022,NA,NA,NA,NA
8	JANG Jae Won,2022,NA,NA,NA,NA
9	KIM Jae Heon,2022,NA,NA,NA,NA
10	Kyeong Joo Jung,2018,2018,NA,"PhD Student @ Computer Science, Ohio State University, USA.", <a href="https://www.google.com/url?q=https%3A%2F%2Fpeople.engineering.osu.edu%2Fpeople%2Fjung.75">https://www.google.com/url?q=https%3A%2F%2Fpeople.engineering.osu.edu%2Fpeople%2Fjung.75</a>
11	Thejaswini M,2017,2018,NA,"Assistant Professor @ Computer Science and Engineering, <a href="#">IIIT</a> Bhagalpur, India.", <a href="https://www.google.com/url?q=https%3A%2F%2Fiitb.ac.in%2Faccse&amp;sa=D&amp;sr">https://www.google.com/url?q=https%3A%2F%2Fiitb.ac.in%2Faccse&amp;sa=D&amp;sr</a>
12	Pratik Musale,2018,2018,NA,"PhD Student @ Computer Science, University of Pittsburgh, USA. ", <a href="http://www.google.com/url?q=http%3A%2F%2Fpeople.cs.pitt.edu%2F-prm73%2Findex.html&amp;sa=D">http://www.google.com/url?q=http%3A%2F%2Fpeople.cs.pitt.edu%2F-prm73%2Findex.html&amp;sa=D</a>
13	Poria Hasanpor,2015,2016,NA,"Development Manager @ <a href="#">Enerim Oy</a> , Helsinki, Finland", <a href="https://www.google.com/url?q=https%3A%2F%2Ffi.linkedin.com%2Fporiahd&amp;sa=D&amp;sntz=1&amp;usq=A0vVaw2I">https://www.google.com/url?q=https%3A%2F%2Ffi.linkedin.com%2Fporiahd&amp;sa=D&amp;sntz=1&amp;usq=A0vVaw2I</a>
14	Duvin Baek,2014,2019,NA,"PhD Student @ Computer Science, Stony Brook University, USA.",NA
15	Tan Le,2013,2017,NA,"PhD Student @ Computer Science, Stony Brook University, USA.",NA
16	Neetesh Saxena,2014,2015,NA,"Assistant Professor @ Computer Science and Informatics, Cardiff University, UK.", <a href="https://www.google.com/url?q=https%3A%2F%2Fsites.google.com%2Fsite%2F">https://www.google.com/url?q=https%3A%2F%2Fsites.google.com%2Fsite%2F</a>
17	Saba Al-Rubaye,2014,2015,NA,"Senior Lecturer @ Autonomous and Connected Systems, <a href="#">Cranfield</a> University, UK. ", <a href="https://www.google.com/url?q=https%3A%2F%2Fwww.cranfield.ac.uk%2Fpeople">https://www.google.com/url?q=https%3A%2F%2Fwww.cranfield.ac.uk%2Fpeople</a>
18	Shinyoung Cho,2013,2016,NA,"Assistant Professor @ Computer Science Smith College, MA, USA", <a href="https://www.google.com/url?q=https%3A%2F%2Fwww.smith.edu%2Facademics%2Ffaculty%2Fshinyoung">https://www.google.com/url?q=https%3A%2F%2Fwww.smith.edu%2Facademics%2Ffaculty%2Fshinyoung</a>