

## CW12-2: Python HTTP Server - Assertion – Testing

### 1. Python HTTP Server:

Design a Python HTTP server that implements a simple todo program. The server should handle GET and POST requests to manage a todo list.

- a) Implement a Python HTTP server that listens on a specific port.
- b) On a GET request to the root ("/") endpoint, the server should return the current todo list as a JSON-like response.
- c) The todo list should be initially empty.
- d) The response should include the appropriate headers to indicate the content type as "application/json".
- e) On a POST request to the root ("/") endpoint, the server should create a new todo item.
- f) The server should expect the todo item as a JSON payload in the request body.
- g) The todo item should have properties such as "id," "title," and "description".
- h) Append the new todo item to the existing todo list.
- i) Test your server using a tool like **curl** or **requests** module.
- j) Make a GET request to retrieve the current todo list and ensure it is initially empty.
- k) Make a POST request to create a new todo item with appropriate JSON payload. Make another GET request to verify that the new todo item is added to the list.