

# AI ASSISTANCE DOCUMENTATION

Date

25-May-2024

S/N	PROBLEM DESCRIPTION	SOLUTION FROM AI	SOLUTION IMPLEMENTED
1	To test PSK authentication	Use hashlib to generate a valid PSK hash valid_psk_hash = hashlib.sha256(PSK.encode()).hexdigest()	valid_psk_hash = hashlib.sha256(PSK.encode()).hexdigest()
2	Query not being processed	Check if the query matches any line in the file exactly	response = 'STRING EXISTS\n' if data in match else 'STRING NOT FOUND\n'
3	File contents not being preloaded	Preload the file contents into memory at startup Solution Implemented: with open(file_path, 'r') as file: file_contents = file.read()	with open(file_path, 'r') as file: file_contents = file.read()
4	Server not reloading file contents on query	if reread_on_query: with open(file_path, 'r') as file: file_contents = file.read().splitlines()	if REREAD_ON_QUERY: with open(FILE_PATH, 'r') as text:
5	Unable to test query processing errors	Use side_effect to raise a QueryError exception Solution Implemented:	mock_conn.recv.side_effect = QueryError handle_client(mock_conn, (HOST, PORT))
6	Server not logging response sent to client	Use print() to log the response sent to the client	print("DEBUG: Response sent to {}: {}".format(addr, response.strip()))
7	Unable to test client disconnections	Use side_effect to raise a ConnectionResetError exception	mock_conn.recv.side_effect = ConnectionResetError
8	To test query processing with invalid query	Use a mock connection object with an invalid query mock_conn.recv.return_value = b'invalid_query'	mock_conn.recv.return_value = b'invalid_query'
9	Test PSK authentication errors	Use side_effect to raise an AuthenticationError exception	mock_conn.recv.side_effect = AuthenticationError handle_client(mock_conn, (HOST, PORT))
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