

## Laboratory\_04: Basic Network Communication and Hashing in Python

In this lab you will write a very simple client and server using hashlib.

### Your task

Your job is to write a client and a server that connects to the server, retrieves hashes. It, and then displays the fortune to the user. When you connect to this server over TCP it sends a hashed [fortune](#). Here is some important information:

- Use three different algorithms: sha256, sha1 and md5.
- Consider verify the traffic using wireshark or tshark.

### References

1. Consider at the [socket api](#) for Python. (The link is is for Python 3.6, but you can change the version in the upper left of the page.)

### Hints

1. Socket programming is a big topic, so here is some sample code to open a new connection to a given port, read some bytes, and print them:
2. `import socket`
3. `sock = socket.create_connection(())`
4. `data = sock.recv(4096)`
5. `print(data)`
6. `sock.close()`