## Assignment 4

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## Task 4.4 (theoretical): TLS Cipher Suites TLS\_ECDHE\_RSA\_WITH\_AES\_128\_GCM\_SHA256

ECDHE - Cipher suites using authenticated ephemeral ECDH key agreement. the client and server will agree on encryption keys using Ephemeral Elliptic Curve Diffie-Hellman. RSA - Cipher suites using RSA key exchange, authentication or either respectively. the client will verify that the key is valid using the RSA algorithm to communications. AES128 GCM - cipher suites using 128 bit AES. AES in Galois Counter Mode (GCM). the actual encryption of my web browsing session will be performed SHA256 - Ciphersuites using SHA256. the SHA algorithm will be used for securely hashing parts of the TLS messages.

- 1. Authentication
- 2. Encryption
- 3. Integrity

TLS RSA RC4 128 MD5 [1]

## References

[1] Not forget http://www.welivesecurity.com/2015/02/05/alternatives-passwords/WeLiveSecurity by ESET