

SECRYPT Task 1: Cryptographic Data Structures

Design a single cryptographic data structure (a crypto message), which solves the following riddle:

- 1- The message is only readable to Bob
- 2- The message contains multiple parts, and one of them originated from Alice, however another part could have originated from either Bob or a third-party server
- 3- Even though we know that the part that originated from Alice contains the string "hello life", we cannot read that string
- 4- Only Bob knows the part that originated from Alice
- 5- There are "at most", four encryptions in the message