

Exercise 4: Transmitting

Purpose: Transmit messages across a distance.

Instructions

1. In Visual Studio Code, open the Transmitting file.

Double click 3_Transmit.py.

2. Test the transmission tool.

- a. Run the program.



- b. Enter "h".
- c. Confirm the transmission.
- d. Enter "y" to send the next message.

3. Teams will sit 1-2 meters apart.

- a. One member will transmit a message.
- b. The other will decode using the sheet.
- c. Show the result to your team assistant.
- d. Change places after each transmission, like a relay.

4. Each group member will practice transmitting and decoding characters as LEDs.

Show your team assistant the matching result on the sheet before continuing!

- a. Team Member 1: Transmit

- i. Decrypt 4_test1a.txt.gpg.
Password: test1a
- ii. Transmit all messages in the file.

- b. Team Member 2: Decode

- i. Track the LED sequences.
- ii. A unique pattern depicts START.
- iii. A single character is sent over in two sequences.
- iv. **Give a visual signal to ask for the next message.**
- v. A unique pattern depicts STOP.

- c. Swap and do test1b.
- d. Work through all the tests.

5. This is the Practice Round!

Sort out the bugs and try to get faster.

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Example

