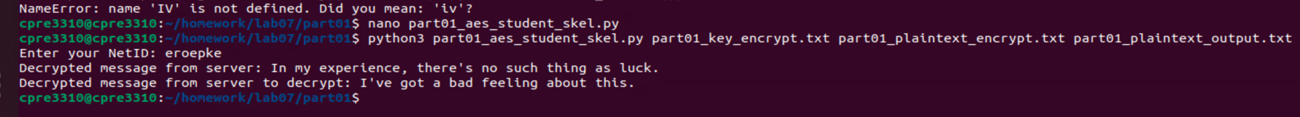
**Lab 07 Template – Ethan Roepke**

**Part 01**

1. **Take a screenshot of the response from the server and the decrypted message from the server.  It must contain your netid.** (10 points total)



1. **What difficult problem about using symmetric keys does this demonstrate? Think about the two parties (your client and my server) having to share the same key.  What protocol have we started to discuss in lecture that can solve this problem?**(20 points total, 10 points each question)
2. **Functional code submitted to Canvas.** (20 points total)

part01\_eroepke\_aes\_skel.py

**Part 02**

1. **Open the two images and take a screenshot of them.** (10 points)

A screen shot of a computer screen

Description automatically generatedA screen shot of a computer screen

Description automatically generated

1. **How does ECB mode handle these repetitive blocks, and why does this lead to visible patterns in the encrypted image?** (10 points total, 5 points each question)
2. **What effect does CBC mode have on repetitive structures in the image compared to ECB mode?How does the introduction of the Initialization Vector (IV) in CBC mode help in obscuring patterns that are visible in ECB mode?**

(20 points total, 10 points each question)

1. **Upload python code for part 02**.(10 points)

part02\_eroepke\_ecb\_cbc.py