Assignment 01 -- SMTP

Task 1 - Interact with an SMTP server

2)

```
1. visdesai@silo:~$ telnet mail-relay.iu.edu 25
2. Trying 129.79.1.38...
3. Connected to mail-relay.iu.edu.
Escape character is '^]'.
5. 220 Sendmail ESMTP - IU Campus Communications Team - Mail-Relay
6. HELO google.com
250 mail-relay.iu.edu Hello silo.luddy.indiana.edu [129.79.247.195], pleased to meet
8. MAIL FROM:<visdesai@iu.edu>
9. 250 2.1.0 <visdesai@iu.edu>... Sender ok
10. RCPT TO:<sice-networks-l@list.indiana.edu>
11. 250 2.1.5 <sice-networks-l@list.indiana.edu>... Recipient ok
12. DATA
13. 354 Enter mail, end with "." on a line by itself
14. Subject: Vishwas Desai Assignment 01 SMTP
15. Submission for Assignment 01_SMTP
17. 250 2.0.0 1893oIgU023311 Message accepted for delivery
18. QUIT
19. 221 2.0.0 mail-relay.iu.edu closing connection
20. Connection closed by foreign host
```

3)

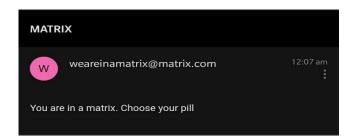
a) What happens when you try to send to a non-IU email address? Why?

```
    visdesai@silo:~$ telnet mail-relay.iu.edu 25
    Trying 129.79.1.38...
    Connected to mail-relay.iu.edu.
    Escape character is '^]'.
    220 Sendmail ESMTP - IU Campus Communications Team - Mail-Relay
    HELO google.com
    250 mail-relay.iu.edu Hello silo.luddy.indiana.edu [129.79.247.195], pleased to meet you
    MAIL FROM:
    visdesai@iu.edu>
    250 2.1.0 <visdesai@iu.edu>... Sender ok
    RCPT TO:
    vishwasdesai.info@gmail.com>
    550 5.7.1 <vishwasdesai.info@gmail.com>... Relaying denied. Proper authentication required.
```

It displays a "Relaying denied, Proper authentication required" which means we are trying to send mail via the IU server, but the recipient mail address is misconfigured or missing from the server. The recipient address is not handled by IU server hence the "Relaying denied" message. Most servers often deny requests to prevent spam.

b) What happens when you use a made-up from address? Why?

```
1. visdesai@silo:~$ telnet mail-relay.iu.edu 25
2. Trying 129.79.1.38...
3. Connected to mail-relay.iu.edu.
4. Escape character is '^]'.
5. 220 Sendmail ESMTP - IU Campus Communications Team - Mail-Relay
6. HELO google.com
7. 250 mail-relay.iu.edu Hello silo.luddy.indiana.edu [129.79.247.195], pleased to meet you
8. MAIL FROM:<weareinamatrix@matrix.com>
9. 250 2.1.0 <weareinamatrix@matrix.com>... Sender ok
10. RCPT TO:<visdesai@iu.edu>
11. 250 2.1.5 <visdesai@iu.edu>... Recipient ok
12. DATA
13. 354 Enter mail, end with "." on a line by itself
14. Subject: MATRIX
15. You are in a matrix. Choose your pill
16. .
17. 250 2.0.0 18945oNf003312 Message accepted for delivery
19. 221 2.0.0 mail-relay.iu.edu closing connection
20. Connection closed by foreign host.
```



The server relayed the mail from a made-up address as it only authenticates the recipient address and not the senders address so this allows scammers to forge senders address and makes the server vulnerable to email spoofing. Through this way, viruses are spread, and the server is hacked to obtain private data.