

Matthew Boyd

## Task 1

3000 year old Tonic drink melts 33lbs in 28 days ➤



zebidiahc@gmail.com

to bcc: mrboyd1 ▾

Sike, sup dog

↩ Reply

➡ Forward

```
---
read R BLOCK
220 smtp.gmail.com ESMTP 3sm670063pjk.26 - gsmt
helo gmail.com
250 smtp.gmail.com at your service
auth login
334 VXNlcm5hbWU6
emViaWRpYWljQGdtYWlsLmNvbQ==
334 UGFzc3dvcmQ6
235 2.7.0 Accepted
mail from: zebidiahc@gmail.com
555 5.5.2 Syntax error. 3sm670063pjk.26 - gsmt
mail from: <zebidiahc@gmail.com>
250 2.1.0 OK 3sm670063pjk.26 - gsmt
rcpt to: <mrboyd1@asu.edu>
250 2.1.5 OK 3sm670063pjk.26 - gsmt
data
354 Go ahead 3sm670063pjk.26 - gsmt
Subject: 3000 year old Tonic drink melts 33lbs in 28 days
Sike, sup dog
.
250 2.0.0 OK 1613438010 3sm670063pjk.26 - gsmt
quit
221 2.0.0 closing connection 3sm670063pjk.26 - gsmt
read:errno=0
matthew@matthew-VirtualBox:~$
```

1. I used TCP.port == 465, since we were specifically using port 465.
2. 25 is the standard port for smtp, we used 465 because it allows ssl encryption.
- 3.

*openssl s\_client -crlf -ign\_eof -connect smtp.gmail.com:465*

Start a ssl connection on port 465.

*helo gmail.com*

Initiates the conversation, connects to given domain which is gmail.com

*auth login*

Tell the domain you'd like to login. Lets you enter username and password

*mail from : <[username@gmail.com](mailto:username@gmail.com)>*

Tells smtp server that a new transaction from your email is starting.

*rcpt to : <[username@gmail.com](mailto:username@gmail.com)>*

Tells the server who the recipient of the email is

*Data*

Used to pass a subject and body

*Subject : Your subject*

Allows you enter your subject and body

*Quit*

Closes the connection on port 465

4. There were 11 back and forth connections to setup the ssl connection on port 465
5. Port of my machine was 40508
6. First fin flag is sent from port 465. The fin flag from 465 requests for termination from my machine.

## Task2



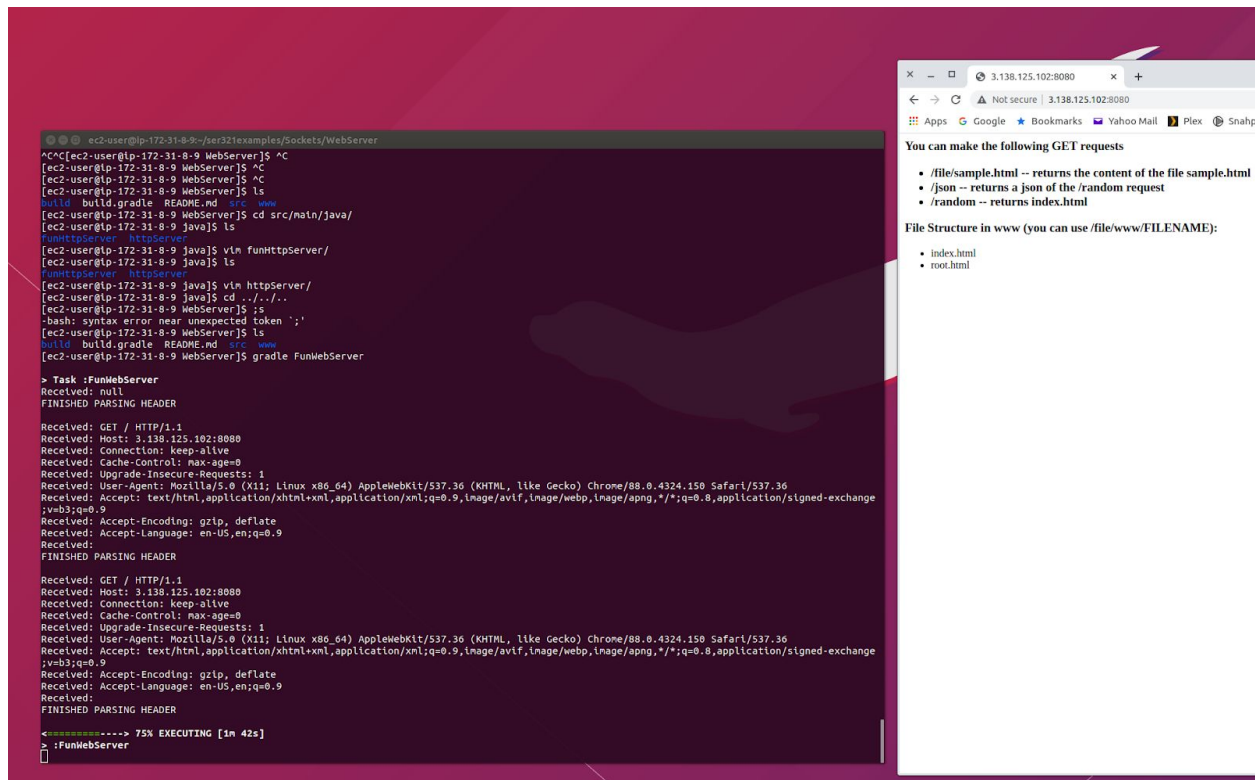
```
[
  {
    "sha": "89de9999a8b1fad6bb4ffad13f727331b835887",
    "node_id": "MDY6Q29tbWl0MTY0NDgxMz40jg5ZGU5OTk5YThtbWZhZDZiYjRmZmZhZDEzZjcyNzZmNmNI4MzU4ODc=",
    "commit": {
      "author": {
        "name": "amehlhase316",
        "email": "46384989+amehlhase316@users.noreply.github.com",
        "date": "2020-10-12T22:27:47Z"
      },
      "committer": {
        "name": "GitHub",
        "email": "noreply@github.com",
        "date": "2020-10-12T22:27:47Z"
      },
      "message": "Update DeliverableX.md",
      "tree": {
        "sha": "84c2d704ea4bf7e4cd3054efb36429bccccf298a6",
        "url": "https://api.github.com/repos/amehlhase316/memoranda/git/trees/84c2d704ea4bf7e4cd3054efb36429bccccf298a6"
      },
      "url": "https://api.github.com/repos/amehlhase316/memoranda/git/commits/89de9999a8b1fad6bb4ffad13f727331b835887",
      "comment_count": 0,
      "verification": {
        "verified": true,
        "reason": "valid",
        "signature": "-----BEGIN PGP SIGNATURE-----\n\nnwsBcBAABCAAQBJfNhhjCRBK7hj40v3rIwAadHIIAJoAVrNjM5KCVzNOTrS6RKvA\nnfW3yXUmw6T8pUGZfGLBD0nS+Vrd/N3jGI4vmKXBiQa6KjwvR67GGHv7pOsHXDFSw\n\nno0\n"
        "payload": "tree 84c2d704ea4bf7e4cd3054efb36429bccccf298a6\nparent fb7f5f8458760e79258687d01a7077ecf5a8f9a0\nauthor amehlhase316 <46384989+amehlhase316@users.noreply.github.com> 16021"
      }
    },
    "url": "https://api.github.com/repos/amehlhase316/memoranda/commits/89de9999a8b1fad6bb4ffad13f727331b835887",
    "html_url": "https://github.com/amehlhase316/memoranda/commit/89de9999a8b1fad6bb4ffad13f727331b835887",
    "comments_url": "https://api.github.com/repos/amehlhase316/memoranda/commits/89de9999a8b1fad6bb4ffad13f727331b835887/comments",
    "author": {
      "login": "amehlhase316",
      "id": 46384989,
      "node_id": "MDQ6VXNlcjQ2Mzg0Tg5",
      "avatar_url": "https://avatars.githubusercontent.com/u/46384989?v=4",
      "gravatar_id": "",
      "url": "https://api.github.com/users/amehlhase316",
      "html_url": "https://github.com/amehlhase316",
      "followers_url": "https://api.github.com/users/amehlhase316/followers",
      "following_url": "https://api.github.com/users/amehlhase316/following{/other_user}",
      "gists_url": "https://api.github.com/users/amehlhase316/gists{/gist_id}",
      "starred_url": "https://api.github.com/users/amehlhase316/starred{/owner}/{repo}",
      "subscriptions_url": "https://api.github.com/users/amehlhase316/subscriptions",
      "organizations_url": "https://api.github.com/users/amehlhase316/orgs",
      "repos_url": "https://api.github.com/users/amehlhase316/repos",
      "events_url": "https://api.github.com/users/amehlhase316/events{/privacy}",
      "received_events_url": "https://api.github.com/users/amehlhase316/received_events",
      "type": "User",
      "site_admin": false
    },
    "committer": {
      "login": "web-flow",
      "id": 19864447,
      "node_id": "MDQ6VXNlcjE5ODY0NDQ3",
      "avatar_url": "https://avatars.githubusercontent.com/u/19864447?v=4",
      "gravatar_id": "",
      "url": "https://api.github.com/users/web-flow",
      "html_url": "https://github.com/web-flow",
      "followers_url": "https://api.github.com/users/web-flow/followers",
      "following_url": "https://api.github.com/users/web-flow/following{/other_user}",
      "gists_url": "https://api.github.com/users/web-flow/gists{/gist_id}",
      "starred_url": "https://api.github.com/users/web-flow/starred{/owner}/{repo}",
      "subscriptions_url": "https://api.github.com/users/web-flow/subscriptions",
      "organizations_url": "https://api.github.com/users/web-flow/orgs",
      "repos_url": "https://api.github.com/users/web-flow/repos",
      "events_url": "https://api.github.com/users/web-flow/events{/privacy}",
      "received_events_url": "https://api.github.com/users/web-flow/received_events",
      "type": "User",
      "site_admin": false
    }
  }
]
```

```
api.github.com/repos/amehlhase316/memoranda/commits?per_page=100

{
  "sha": "89de999a8b1fad6bb4ffad13f727331b835887",
  "node_id": "MDY6Q29tbWl0MTY0NDgxMzQ0jg5ZGUSOTk5VThtlWZHZDZiYjRmZmZhZDEzZjcyNzNzNmI4NzU4ODc=",
  "commit": {
    "author": {
      "name": "amehlhase316",
      "email": "46384989+amehlhase316@users.noreply.github.com",
      "date": "2020-10-12T22:27:47Z"
    },
    "committer": {
      "name": "GitHub",
      "email": "noreply@github.com",
      "date": "2020-10-12T22:27:47Z"
    },
    "message": "Update DeliverableX.md",
    "tree": {
      "sha": "84c2d704ea4bf7e4cd3054efb36429bcccf298a6",
      "url": "https://api.github.com/repos/amehlhase316/memoranda/git/trees/84c2d704ea4bf7e4cd3054efb36429bcccf298a6"
    },
    "url": "https://api.github.com/repos/amehlhase316/memoranda/git/commits/89de999a8b1fad6bb4ffad13f727331b835887",
    "comment_count": 0,
    "verification": {
      "verified": true,
      "reason": "valid",
      "signature": "-----BEGIN PGP SIGNATURE-----\n\nwsBcBAABCAARQ3fhHjCRBK7hj40v3rTwAAdHIAJoaVnHjMSXCVzNOT=56RKvA/nfh3yXUmwG78pUGfGLBD0n5+Vrd/N3jGI4vmKXBjQa6KjwvR67GGHV7pOsHXDfSm/nnOmQgQUSj\n\npayload: tree 84c2d704ea4bf7e4cd3054efb36429bcccf298a6\nparent fb7f5f8458760e79258687d01a7077ecf5a8f9a0\nauthor amehlhase316 <46384989+amehlhase316@users.noreply.github.com> 1602541667"
    }
  },
  "url": "https://api.github.com/repos/amehlhase316/memoranda/commits/89de999a8b1fad6bb4ffad13f727331b835887",
  "html_url": "https://github.com/amehlhase316/memoranda/commit/89de999a8b1fad6bb4ffad13f727331b835887",
  "comments_url": "https://api.github.com/repos/amehlhase316/memoranda/commits/89de999a8b1fad6bb4ffad13f727331b835887/comments",
  "author": {
    "login": "amehlhase316",
    "id": 46384989,
    "node_id": "MDQ6VXNlcjQ2Mzg0OTg5",
    "avatar_url": "https://avatars.githubusercontent.com/u/46384989?v=4",
    "gravatar_id": "",
    "url": "https://api.github.com/users/amehlhase316",
    "html_url": "https://github.com/amehlhase316",
    "followers_url": "https://api.github.com/users/amehlhase316/followers",
    "following_url": "https://api.github.com/users/amehlhase316/following{/other_user}",
    "gists_url": "https://api.github.com/users/amehlhase316/gists{/gist_id}",
    "starred_url": "https://api.github.com/users/amehlhase316/starred{/owner}{/repo}",
    "subscriptions_url": "https://api.github.com/users/amehlhase316/subscriptions",
    "organizations_url": "https://api.github.com/users/amehlhase316/orgs",
    "repos_url": "https://api.github.com/users/amehlhase316/repos",
    "events_url": "https://api.github.com/users/amehlhase316/events{/privacy}",
    "received_events_url": "https://api.github.com/users/amehlhase316/received_events",
    "type": "User",
    "site_admin": false
  },
  "committer": {
    "login": "web-flow",
    "id": 19864447,
    "node_id": "MDQ6VXNlcjE5ODY0NDQ3",
    "avatar_url": "https://avatars.githubusercontent.com/u/19864447?v=4",
    "gravatar_id": "",
    "url": "https://api.github.com/users/web-flow",
    "html_url": "https://github.com/web-flow",
    "followers_url": "https://api.github.com/users/web-flow/followers",
    "following_url": "https://api.github.com/users/web-flow/following{/other_user}",
    "gists_url": "https://api.github.com/users/web-flow/gists{/gist_id}",
    "starred_url": "https://api.github.com/users/web-flow/starred{/owner}{/repo}",
    "subscriptions_url": "https://api.github.com/users/web-flow/subscriptions",
    "organizations_url": "https://api.github.com/users/web-flow/orgs",
    "repos_url": "https://api.github.com/users/web-flow/repos",
    "events_url": "https://api.github.com/users/web-flow/events{/privacy}",
  }
}
```

1. The first API call I used specified a repo, gave the username, gave the project name and requested all the commits to the default branch which was master. The second was the same except it included the per\_page parameter which was set to 100.
2. Stateless communication is when a client sends a request and the server returns a reply according to its state. No session information needs to be stored on the server. In stateful communication session information as well needs to be stored.

## Task 3.2



## Task3.3

1. I used `tcp.port==8080` because the traffic was using TCP protocol and it was going through port 8080
2. Random makes 2 GET requests, while normally there's only one.
3. 200, 400, 404
4. I got 200 when going to the main page or the random page, which made sense because 200 is the "OK" response code. When using `/file/sample.html` I received a 404 and a 400 which makes sense. I got the 404 since sample.html didn't exist, and I got a 400 because it was a bad request.
5. Yes all the data that the server sends back is there.
6. HTTPs has encryption which makes it safe from people easily sniffing packets for any user data.
7. The server listens to port 8080. Ports 80 is most common but 8008 and 8080 are also common http ports.
8. My local port used was 39276. For smtp the port was in the 40,000's range.



