CMSC257 Project 2 screenshots
Jordan Dube

SAMPLE RUN:

```
03 - cbluer@mail.com       - 12/08/2020 - 4th email!
04 - cboyle@mail.com       - 12/18/2020 - 5th email!
02 - dboyle@mail.com       - 12/02/2020 - 3rd email!
09 - dboyle@mail.com       - 03/15/2021 - Last email!
01 - mmartinez@mail.com    - 11/30/2020 - Padding out you
06 - sblack@mail.com       - 01/05/2021 - 7th email!
07 - sblack@mail.com       - 02/15/2021 - 8th email!
08 - sblack@mail.com       - 02/25/2021 - 9th email!
05 - sblack@mail.com       - 01/01/2021 - 6th email!


Mailbox sorted by ID
***************   DUBEJZ INBOX   ***************
*************** TOTAL INBOX: 0010 ***************
1. Show Inbox
2. Show Email by ID
3. Sort Inbox by Sender
4. Sort Inbox by ID
5. Search Inbox by Keyword
6. Delete
7. Exit Inbox

Enter an option 1-7: 5

Enter the keyword to search for: oyl

Found email(s):


ID   SENDER--------------   MM/DD/YYYY   Subject--------
--   --------------------   --/--/----   ---------------
04 - cboyle@mail.com       - 12/18/2020 - 5th email!
02 - dboyle@mail.com       - 12/02/2020 - 3rd email!
09 - dboyle@mail.com       - 03/15/2021 - Last email!

***************   DUBEJZ INBOX   ***************
*************** TOTAL INBOX: 0010 ***************
1. Show Inbox
2. Show Email by ID
3. Sort Inbox by Sender
4. Sort Inbox by ID
5. Search Inbox by Keyword
6. Delete
7. Exit Inbox
```

Window 2 (bottom):

```
3. Sort Inbox by Sender
4. Sort Inbox by ID
5. Search Inbox by Keyword
6. Delete
7. Exit Inbox

Enter an option 1-7: 5

Enter the keyword to search for: you

Found email(s):


ID   SENDER--------------   MM/DD/YYYY   Subject--------
--   --------------------   --/--/----   ---------------
00 - asonmez@mail.com      - 11/20/2020 - Welcome to your
02 - dboyle@mail.com       - 12/02/2020 - 3rd email!
01 - mmartinez@mail.com    - 11/30/2020 - Padding out you

***************   DUBEJZ INBOX   ***************
*************** TOTAL INBOX: 0010 ***************
1. Show Inbox
2. Show Email by ID
3. Sort Inbox by Sender
4. Sort Inbox by ID
5. Search Inbox by Keyword
6. Delete
7. Exit Inbox

Enter an option 1-7: 6

Enter the ID to delete: 2

 Email with ID = 2 is deleted
***************   DUBEJZ INBOX   ***************
*************** TOTAL INBOX: 0009 ***************
1. Show Inbox
2. Show Email by ID
3. Sort Inbox by Sender
4. Sort Inbox by ID
5. Search Inbox by Keyword
6. Delete
7. Exit Inbox

Enter an option 1-7:
```

```
Enter an option 1-7: 1


ID   SENDER--------------   MM/DD/YYYY   Subject--------
--   --------------------   --/--/----   ----------------
00 - asonmez@mail.com     - 11/20/2020 - Welcome to your
03 - cbluer@mail.com      - 12/08/2020 - 4th email!
04 - cboyle@mail.com      - 12/18/2020 - 5th email!
09 - dboyle@mail.com      - 03/15/2021 - Last email!
01 - mmartinez@mail.com   - 11/30/2020 - Padding out you
06 - sblack@mail.com      - 01/05/2021 - 7th email!
07 - sblack@mail.com      - 02/15/2021 - 8th email!
08 - sblack@mail.com      - 02/25/2021 - 9th email!
05 - sblack@mail.com      - 01/01/2021 - 6th email!


Mailbox sorted by ID
***************    DUBEJZ INBOX     ***************
*************** TOTAL INBOX: 0009 ***************
1. Show Inbox
2. Show Email by ID
3. Sort Inbox by Sender
4. Sort Inbox by ID
5. Search Inbox by Keyword
6. Delete
7. Exit Inbox

Enter an option 1-7: 5

Enter the keyword to search for: you

Found email(s):


ID   SENDER--------------   MM/DD/YYYY   Subject--------
--   --------------------   --/--/----   ----------------
00 - asonmez@mail.com     - 11/20/2020 - Welcome to your
01 - mmartinez@mail.com   - 11/30/2020 - Padding out you

***************    DUBEJZ INBOX     ***************
*************** TOTAL INBOX: 0009 ***************
1. Show Inbox
2. Show Email by ID
3. Sort Inbox by Sender
4. Sort Inbox by ID
```

```
4. Sort Inbox by ID
5. Search Inbox by Keyword
6. Delete
7. Exit Inbox

Enter an option 1-7: 4

***************    DUBEJZ INBOX     ***************
*************** TOTAL INBOX: 0009 ***************
1. Show Inbox
2. Show Email by ID
3. Sort Inbox by Sender
4. Sort Inbox by ID
5. Search Inbox by Keyword
6. Delete
7. Exit Inbox

Enter an option 1-7: 1


ID   SENDER--------------   MM/DD/YYYY   Subject--------
--   --------------------   --/--/----   ----------------
00 - asonmez@mail.com     - 11/20/2020 - Welcome to your
01 - mmartinez@mail.com   - 11/30/2020 - Padding out you
03 - cbluer@mail.com      - 12/08/2020 - 4th email!
04 - cboyle@mail.com      - 12/18/2020 - 5th email!
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07 - sblack@mail.com      - 02/15/2021 - 8th email!
08 - sblack@mail.com      - 02/25/2021 - 9th email!
09 - dboyle@mail.com      - 03/15/2021 - Last email!


Mailbox sorted by ID
***************    DUBEJZ INBOX     ***************
*************** TOTAL INBOX: 0009 ***************
1. Show Inbox
2. Show Email by ID
3. Sort Inbox by Sender
4. Sort Inbox by ID
5. Search Inbox by Keyword
6. Delete
7. Exit Inbox

Enter an option 1-7:
```
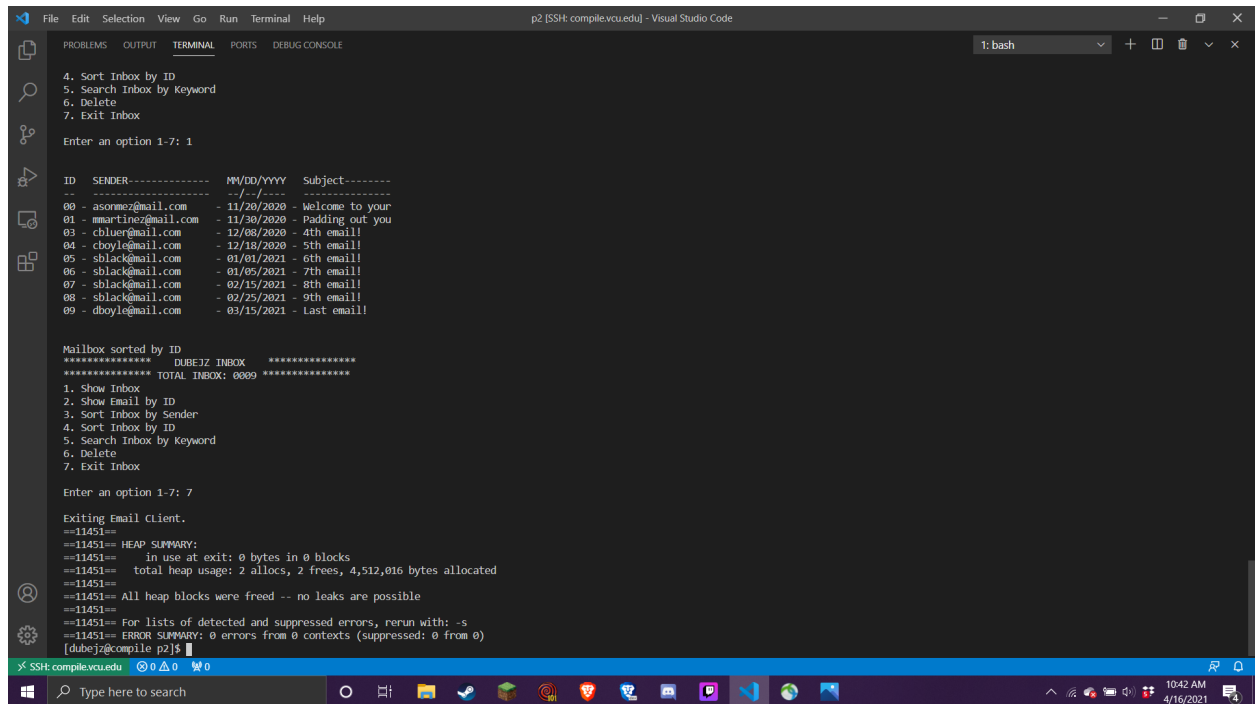
```
4. Sort Inbox by ID
5. Search Inbox by Keyword
6. Delete
7. Exit Inbox

Enter an option 1-7: 1


ID   SENDER--------------   MM/DD/YYYY   Subject--------
--   --------------------   --/--/----   ---------------
00 - asonmez@mail.com      - 11/20/2020 - Welcome to your
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06 - sblack@mail.com       - 01/05/2021 - 7th email!
07 - sblack@mail.com       - 02/15/2021 - 8th email!
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Mailbox sorted by ID
***************   DUBEJZ INBOX    ***************
*************** TOTAL INBOX: 0009 ***************
1. Show Inbox
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3. Sort Inbox by Sender
4. Sort Inbox by ID
5. Search Inbox by Keyword
6. Delete
7. Exit Inbox

Enter an option 1-7: 7

Exiting Email Client.
==11451==
==11451== HEAP SUMMARY:
==11451==     in use at exit: 0 bytes in 0 blocks
==11451==   total heap usage: 2 allocs, 2 frees, 4,512,016 bytes allocated
==11451==
==11451== All heap blocks were freed -- no leaks are possible
==11451==
==11451== For lists of detected and suppressed errors, rerun with: -s
==11451== ERROR SUMMARY: 0 errors from 0 contexts (suppressed: 0 from 0)
[dubejz@compile p2]$
```

Valgrind result at end of the sample run.

Limitations:

a) Entering invalid parameters into the create_email function (such as a string in the day field)

b) Entering a non-int into the id field for the showEmailByID or deleteEmailByID functions

c) If the user enters an invalid int for the option field (i.e. a string rather than an int, or a value outside of the 7 options)