Limitations

- Size: my inbox can only handle up to 2000 emails
- Size of variables: the sender and receivers can only handle strings up to 50 characters, the subject can only hold 200 characters and the body can only contain 2000 characters.
- Ability to write an email
- Ability to check the body of an email

```
******* WELKA 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
ID SENDER ----- MM/DD/YY SUBJECT-----
00 - asonmez@mail.com - 11/20/2020 - Welcome to your inbox.
01 - mmartinez@mail.com - 11/30/2020 - Padding out your inbox.
02 - dboyle@mail.com - 12/02/2020 - 3rd email!
03 - cbluer@mail.com - 12/08/2020 - 4th email!
04 - cboyle@mail.com - 12/18/2020 - 5th email!
05 - sblack@mail.com - 01/01/2021 - 6th email!
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!
09 - dboyle@mail.com - 03/15/2021 - Last email!
********* WELKA 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 the ID of the email you want to read:2
dboyle@mail.com - 3rd email!
Email Recieved on: 12/02/2020********** WELKA INBOX
                                                      **********
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
************ WELKA INBOX **********
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ID SENDER ----- MM/DD/YY SUBJECT-----
   -----
00 - asonmez@mail.com - 11/20/2020 - Welcome to your inbox.
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 your inbox.
05 - sblack@mail.com - 01/01/2021 - 6th email!
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!
************ WELKA 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 the keyword you are searching for: oyl
ID SENDER ----- MM/DD/YY 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!
*********** WELKA INBOX **********
*********** Total Inbox: 0010 ***********
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 the keyword you are searching for: you
ID SENDER ----- MM/DD/YY SUBJECT-----
00 - asonmez@mail.com - 11/20/2020 - Welcome to your inbox.
02 - dboyle@mail.com - 12/02/2020 - 3rd email!
01 - mmartinez@mail.com - 11/30/2020 - Padding out your inbox.
```

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01 - mmartinez@mail.com - 11/30/2020 - Padding out your inbox.
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******** Total Inbox: 0010 *********
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 the ID of the e-mail you want to delete: 2
Email with ID = 2 is deleted********** WELKA 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
ID SENDER ----- MM/DD/YY SUBJECT-----
00 - asonmez@mail.com - 11/20/2020 - Welcome to your inbox.
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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 your inbox.
05 - sblack@mail.com - 01/01/2021 - 6th email!
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!
******** WELKA INBOX *********
******* Total Inbox: 0009 **********
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4. Sort Inbox by ID
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6. Delete
7. Exit Inbox
Enter the keyword you are searching for: you
ID SENDER ------ MM/DD/YY SUBJECT-----
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01 - mmartinez@mail.com - 11/30/2020 - Padding out your inbox.
************ WELKA INBOX
```

```
01 - mmartinez@mail.com - 11/30/2020 - Padding out your inbox.
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****** Total Inbox: 0009 ***********
1. Show Inbox
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****** WELKA INBOX
******* Total Inbox: 0009 ***********
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****** WELKA INBOX
******** Total Inbox: 0009 **********
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4. Sort Inbox by ID
5. Search Inbox by Keyword
6. Delete
7. Exit Inbox
```

```
Exiting e-mail client - Good Bye!==38188==
==38188== HEAP SUMMARY:
==38188== in use at exit: 18,528,016 bytes in 5 blocks
==38188===
            total heap usage: 10 allocs, 5 frees, 18,531,108 bytes allocated
==38188==
==38188== 4,632,000 bytes in 1 blocks are possibly lost in loss record 3 of 4
==38188===
            at 0x4C29F73: malloc (vg_replace_malloc.c:309)
==38188===
             by 0x401112: search_keyword (p2-support.c:118)
==38188===
             by 0x40173B: display_inbox_menu (p2-support.c:177)
==38188===
            by 0x40080A: main (cmsc257-f21-p2.c:9)
==38188==
==38188== 9,264,000 bytes in 2 blocks are definitely lost in loss record 4 of 4
==38188== at 0x4C29F73: malloc (vg_replace_malloc.c:309)
==38188===
             by 0x401112: search_keyword (p2-support.c:118)
==38188===
            by 0x40173B: display_inbox_menu (p2-support.c:177)
==38188===
            by 0x40080A: main (cmsc257-f21-p2.c:9)
==38188===
==38188== LEAK SUMMARY:
==38188== definitely lost: 9,264,000 bytes in 2 blocks
            indirectly lost: 0 bytes in 0 blocks
==38188===
==38188==
             possibly lost: 4,632,000 bytes in 1 blocks
==38188===
             still reachable: 4,632,016 bytes in 2 blocks
==38188===
             suppressed: 0 bytes in 0 blocks
==38188== Reachable blocks (those to which a pointer was found) are not shown.
==38188== To see them, rerun with: --leak-check=full --show-leak-kinds=all
==38188==
==38188== Use --track-origins=yes to see where uninitialised values come from
==38188== For lists of detected and suppressed errors, rerun with: -s
==38188== ERROR SUMMARY: 3 errors from 3 contexts (suppressed: 0 from 0)
[welka@compile p2]$
```