

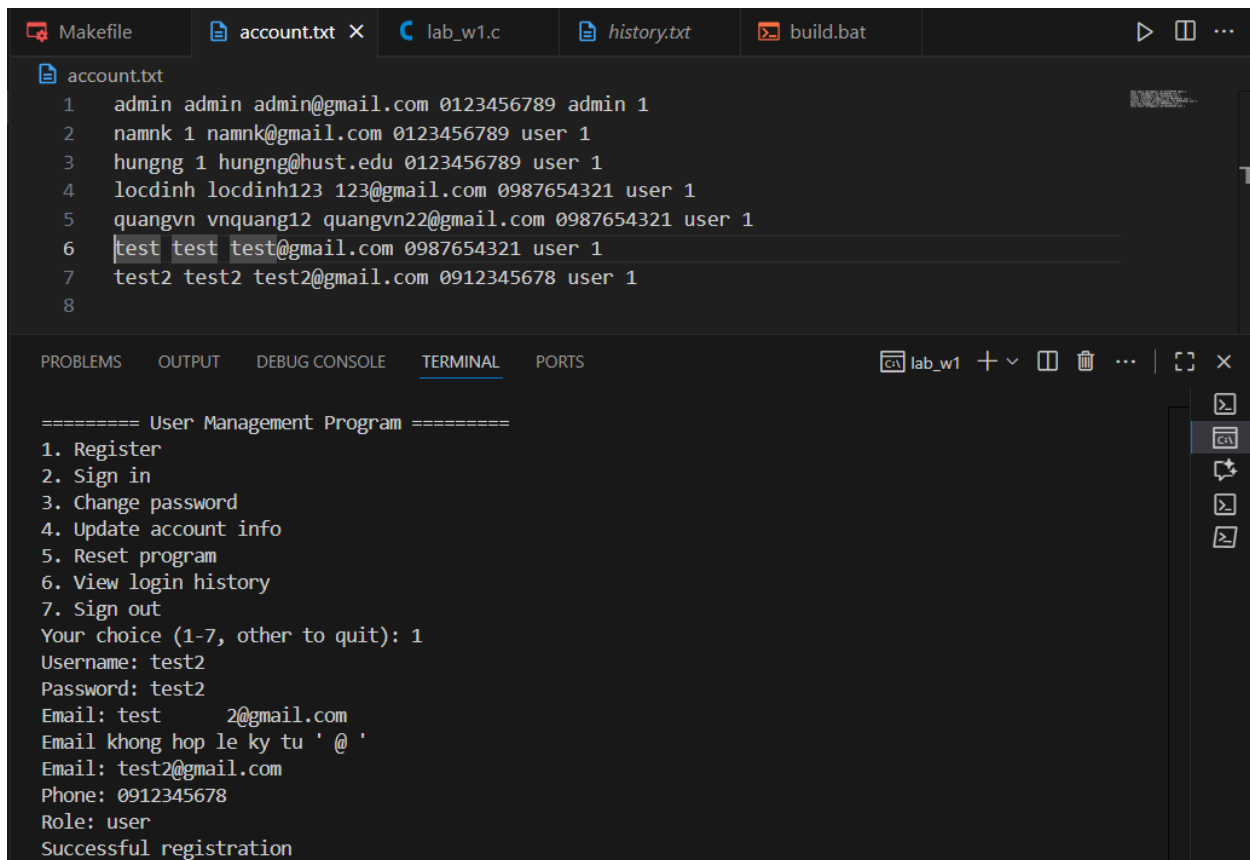
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Demo chương trình:

Mục lục

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| Update account info | 5 |
| Reset program | 6 |
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Register

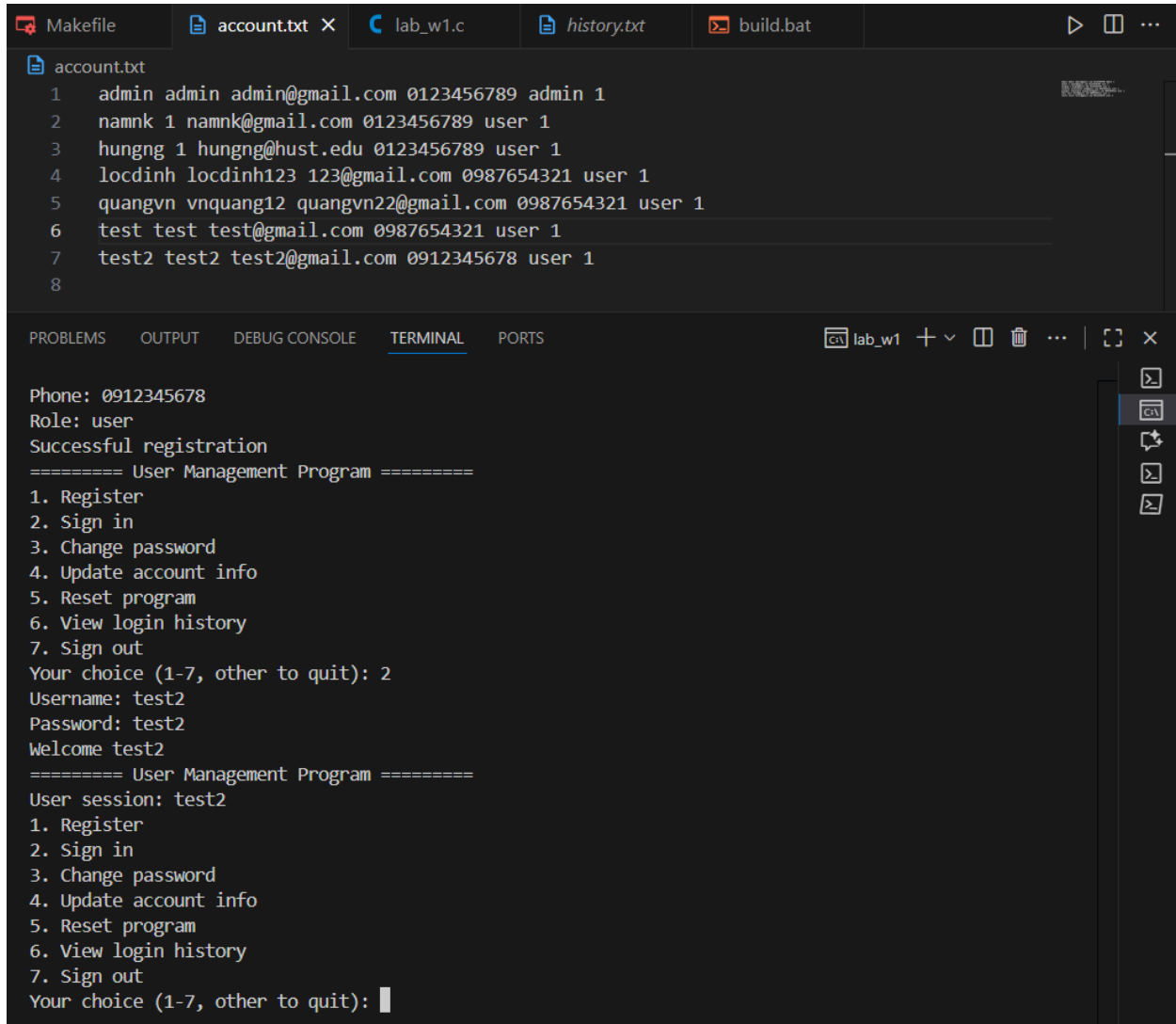


The image shows a code editor with several files open: Makefile, account.txt, lab_w1.c, history.txt, and build.bat. The 'account.txt' file is selected and displays a list of user records. Below the code editor is a terminal window titled 'lab_w1' showing the execution of a 'User Management Program'. The program prompts the user to choose an option from a menu. Option 1, 'Register', is selected. The program then prompts for user details: Username (test2), Password (test2), Email (test2@gmail.com), Phone (0912345678), and Role (user). The final output is 'Successful registration'.

```
account.txt
1  admin admin admin@gmail.com 0123456789 admin 1
2  namnk 1 namnk@gmail.com 0123456789 user 1
3  hungng 1 hungng@hust.edu 0123456789 user 1
4  locdinh locdinh123 123@gmail.com 0987654321 user 1
5  quangvn vnquang12 quangvn22@gmail.com 0987654321 user 1
6  test test test@gmail.com 0987654321 user 1
7  test2 test2 test2@gmail.com 0912345678 user 1
8

===== User Management Program =====
1. Register
2. Sign in
3. Change password
4. Update account info
5. Reset program
6. View login history
7. Sign out
Your choice (1-7, other to quit): 1
Username: test2
Password: test2
Email: test      2@gmail.com
Email khong hop le ky tu ' @ '
Email: test2@gmail.com
Phone: 0912345678
Role: user
Successful registration
```

Sign in



```
Makefile  account.txt X  lab_w1.c  history.txt  build.bat  ▶ □ ...  
account.txt  
1  admin admin admin@gmail.com 0123456789 admin 1  
2  namnk 1 namnk@gmail.com 0123456789 user 1  
3  hungng 1 hungng@hust.edu 0123456789 user 1  
4  locdinh locdinh123 123@gmail.com 0987654321 user 1  
5  quangvn vnquang12 quangvn22@gmail.com 0987654321 user 1  
6  test test test@gmail.com 0987654321 user 1  
7  test2 test2 test2@gmail.com 0912345678 user 1  
8  
  
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS  lab_w1 + ▾ □ 🗑 ... | 🔍 ✕  
  
Phone: 0912345678  
Role: user  
Successful registration  
===== User Management Program =====  
1. Register  
2. Sign in  
3. Change password  
4. Update account info  
5. Reset program  
6. View login history  
7. Sign out  
Your choice (1-7, other to quit): 2  
Username: test2  
Password: test2  
Welcome test2  
===== User Management Program =====  
User session: test2  
1. Register  
2. Sign in  
3. Change password  
4. Update account info  
5. Reset program  
6. View login history  
7. Sign out  
Your choice (1-7, other to quit):
```

Change password

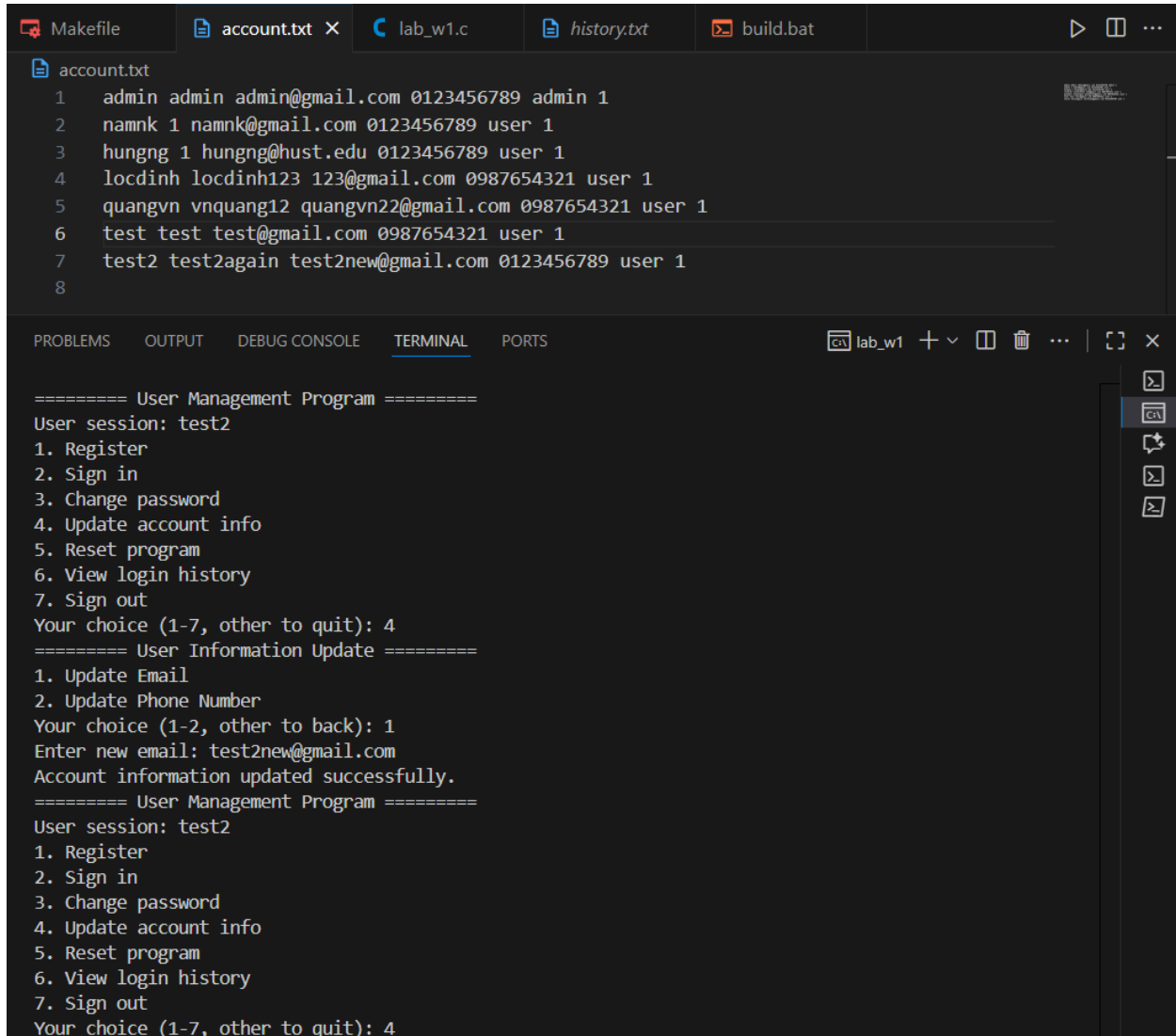
```
Makefile account.txt lab_w1.c history.txt build.bat
```

```
account.txt
1 admin admin admin@gmail.com 0123456789 admin 1
2 namnk 1 namnk@gmail.com 0123456789 user 1
3 hungng 1 hungng@hust.edu 0123456789 user 1
4 locdinh locdinh123 123@gmail.com 0987654321 user 1
5 quangvn vnquang12 quangvn22@gmail.com 0987654321 user 1
6 test test test@gmail.com 0987654321 user 1
7 test2 test2again test2@gmail.com 0912345678 user 1
8
```

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
```

```
===== User Management Program =====
User session: test2
1. Register
2. Sign in
3. Change password
4. Update account info
5. Reset program
6. View login history
7. Sign out
Your choice (1-7, other to quit): 3
Enter current password: abc
Current password is incorrect.
===== User Management Program =====
User session: test2
1. Register
2. Sign in
3. Change password
4. Update account info
5. Reset program
6. View login history
7. Sign out
Your choice (1-7, other to quit): 3
Enter current password: test2
Enter new password: test2again
Password changed successfully.
```

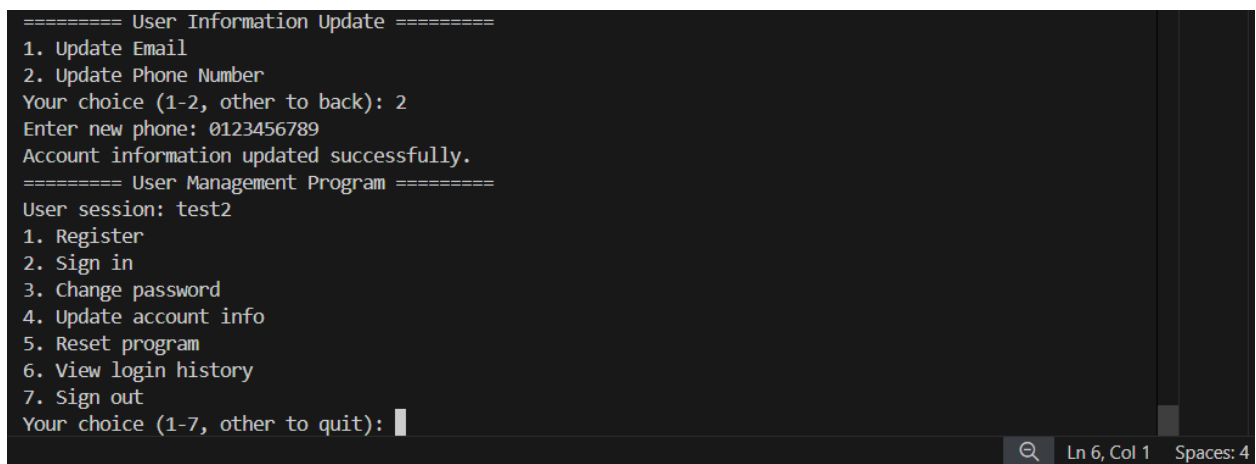
Update account info



The screenshot shows a code editor with several tabs: Makefile, account.txt, lab_w1.c, history.txt, and build.bat. The 'account.txt' tab is active, displaying a list of user accounts. Below the editor, a terminal window is open, showing the execution of a 'User Management Program'. The program prompts the user to choose an option from a menu. The user has selected option 4, 'Update account info'. The program then prompts the user to choose an option from a sub-menu. The user has selected option 1, 'Update Email'. The program then prompts the user to enter a new email address. The user has entered 'test2new@gmail.com'. The program then displays the updated account information.

```
account.txt
1  admin admin admin@gmail.com 0123456789 admin 1
2  namnk 1 namnk@gmail.com 0123456789 user 1
3  hungng 1 hungng@hust.edu 0123456789 user 1
4  locdinh locdinh123 123@gmail.com 0987654321 user 1
5  quangvn vnquang12 quangvn22@gmail.com 0987654321 user 1
6  test test test@gmail.com 0987654321 user 1
7  test2 test2again test2new@gmail.com 0123456789 user 1
8

===== User Management Program =====
User session: test2
1. Register
2. Sign in
3. Change password
4. Update account info
5. Reset program
6. View login history
7. Sign out
Your choice (1-7, other to quit): 4
===== User Information Update =====
1. Update Email
2. Update Phone Number
Your choice (1-2, other to back): 1
Enter new email: test2new@gmail.com
Account information updated successfully.
===== User Management Program =====
User session: test2
1. Register
2. Sign in
3. Change password
4. Update account info
5. Reset program
6. View login history
7. Sign out
Your choice (1-7, other to quit): 4
```



The screenshot shows the continuation of the 'User Management Program' in the terminal. The user has selected option 2, 'Update Phone Number'. The program then prompts the user to enter a new phone number. The user has entered '0123456789'. The program then displays the updated account information.

```
===== User Information Update =====
1. Update Email
2. Update Phone Number
Your choice (1-2, other to back): 2
Enter new phone: 0123456789
Account information updated successfully.
===== User Management Program =====
User session: test2
1. Register
2. Sign in
3. Change password
4. Update account info
5. Reset program
6. View login history
7. Sign out
Your choice (1-7, other to quit):
```

Reset program

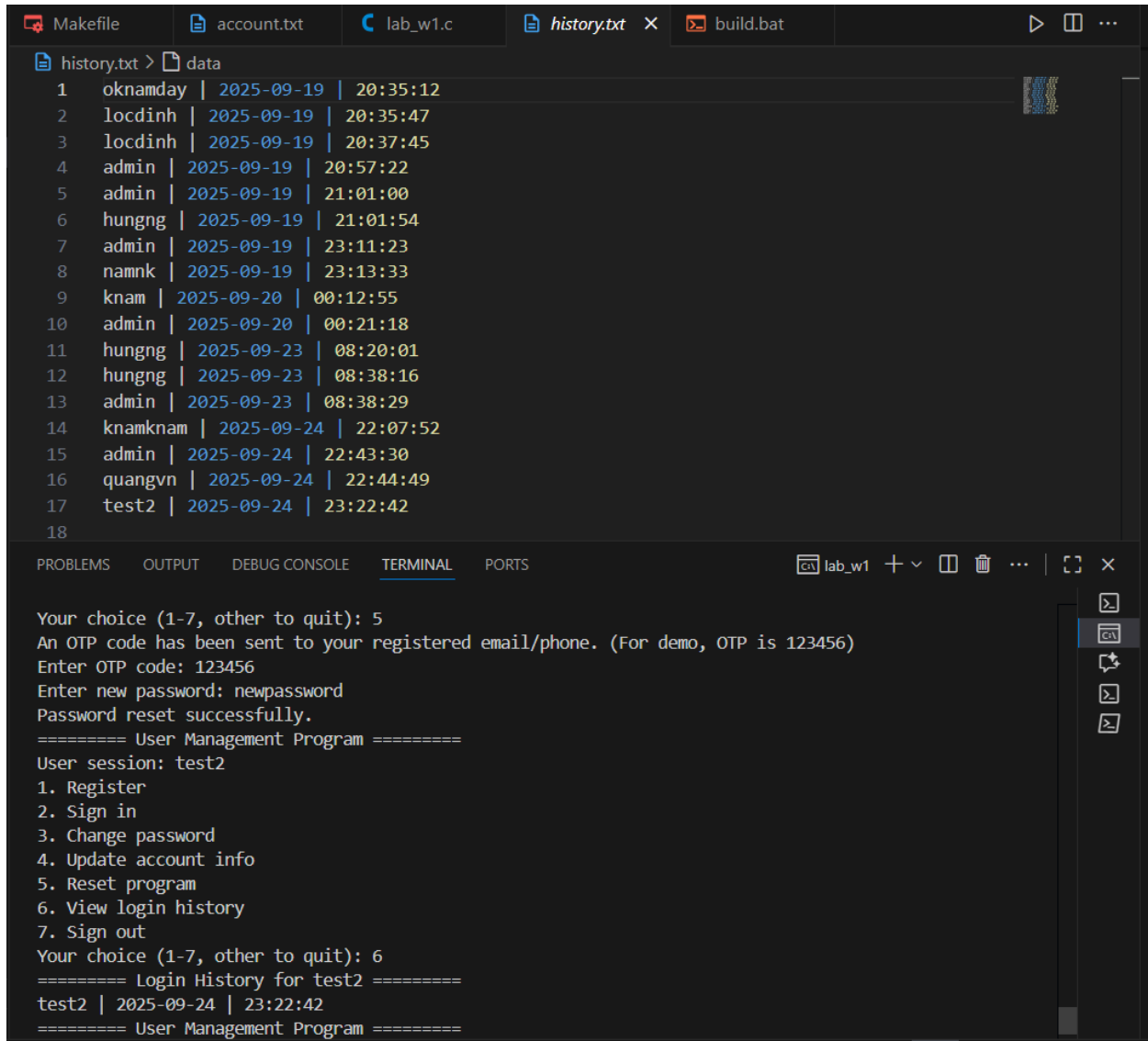
```
Makefile  account.txt X  lab_w1.c  history.txt  build.bat  ▶ □ ...

account.txt
1  admin admin admin@gmail.com 0123456789 admin 1
2  namnk 1 namnk@gmail.com 0123456789 user 1
3  hungng 1 hungng@hust.edu 0123456789 user 1
4  locdinh locdinh123 123@gmail.com 0987654321 user 1
5  quangvn vnquang12 quangvn22@gmail.com 0987654321 user 1
6  test test test@gmail.com 0987654321 user 1
7  test2 newpassword test2new@gmail.com 0123456789 user 1
8

PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS  lab_w1 + v □ □ ... | [ ] X

===== User Management Program =====
User session: test2
1. Register
2. Sign in
3. Change password
4. Update account info
5. Reset program
6. View login history
7. Sign out
Your choice (1-7, other to quit): 5
An OTP code has been sent to your registered email/phone. (For demo, OTP is 123456)
Enter OTP code: 123
Invalid OTP code. Password reset failed.
===== User Management Program =====
User session: test2
1. Register
2. Sign in
3. Change password
4. Update account info
5. Reset program
6. View login history
7. Sign out
Your choice (1-7, other to quit): 5
An OTP code has been sent to your registered email/phone. (For demo, OTP is 123456)
Enter OTP code: 123456
Enter new password: newpassword
Password reset successfully.
```

View login history



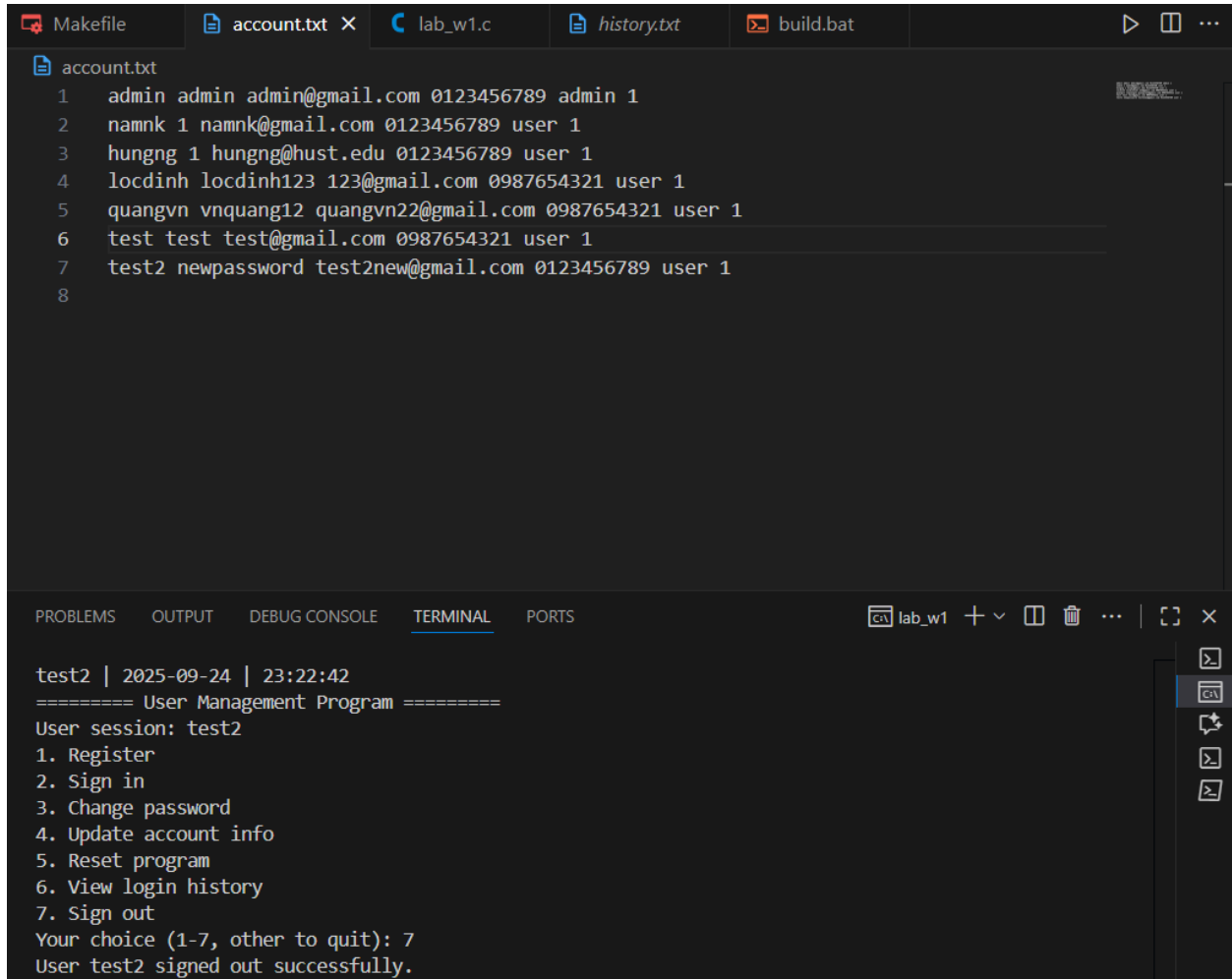
The screenshot shows a code editor with several tabs: `Makefile`, `account.txt`, `lab_w1.c`, `history.txt` (active), and `build.bat`. The `history.txt` file contains a list of login attempts, each with a line number, username, date, and time.

| Line | Username | Date | Time |
|------|----------|------------|----------|
| 1 | oknamday | 2025-09-19 | 20:35:12 |
| 2 | locdinh | 2025-09-19 | 20:35:47 |
| 3 | locdinh | 2025-09-19 | 20:37:45 |
| 4 | admin | 2025-09-19 | 20:57:22 |
| 5 | admin | 2025-09-19 | 21:01:00 |
| 6 | hungng | 2025-09-19 | 21:01:54 |
| 7 | admin | 2025-09-19 | 23:11:23 |
| 8 | namnk | 2025-09-19 | 23:13:33 |
| 9 | knam | 2025-09-20 | 00:12:55 |
| 10 | admin | 2025-09-20 | 00:21:18 |
| 11 | hungng | 2025-09-23 | 08:20:01 |
| 12 | hungng | 2025-09-23 | 08:38:16 |
| 13 | admin | 2025-09-23 | 08:38:29 |
| 14 | knamknam | 2025-09-24 | 22:07:52 |
| 15 | admin | 2025-09-24 | 22:43:30 |
| 16 | quangvn | 2025-09-24 | 22:44:49 |
| 17 | test2 | 2025-09-24 | 23:22:42 |
| 18 | | | |

Below the code editor is a terminal window. It shows the execution of a program. The user has chosen option 5 (Reset program) and entered an OTP code of 123456. The program then displays a menu with options 1 through 7. The user has chosen option 6 (View login history), and the program displays the login history for the user 'test2'.

```
Your choice (1-7, other to quit): 5
An OTP code has been sent to your registered email/phone. (For demo, OTP is 123456)
Enter OTP code: 123456
Enter new password: newpassword
Password reset successfully.
===== User Management Program =====
User session: test2
1. Register
2. Sign in
3. Change password
4. Update account info
5. Reset program
6. View login history
7. Sign out
Your choice (1-7, other to quit): 6
===== Login History for test2 =====
test2 | 2025-09-24 | 23:22:42
===== User Management Program =====
```

Sign out

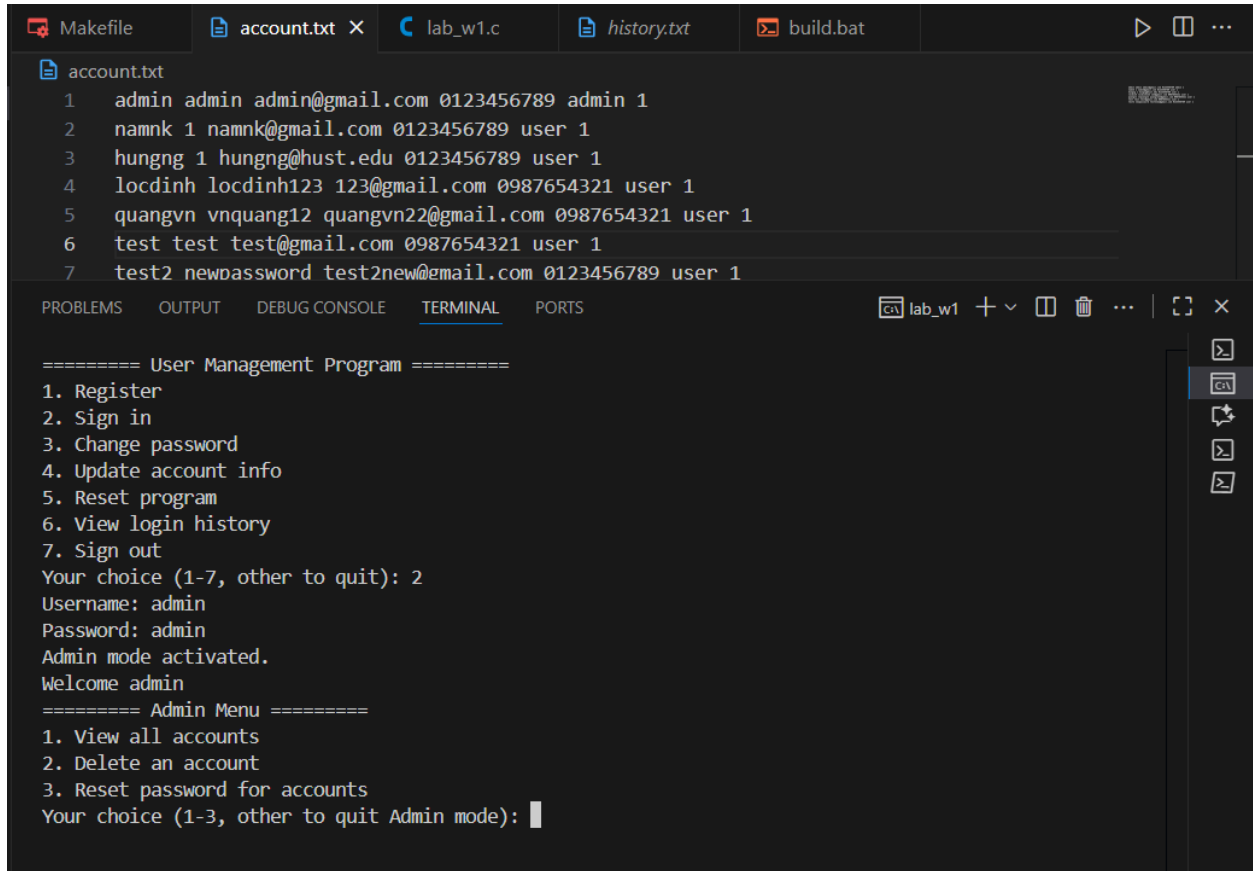


The screenshot shows a VS Code editor with a dark theme. The top bar displays several open files: 'Makefile', 'account.txt' (which is the active file), 'lab_w1.c', 'history.txt', and 'build.bat'. The 'account.txt' file contains a list of user accounts, each with a line number from 1 to 8. The bottom panel shows the 'TERMINAL' tab, which displays the output of a program. The output indicates that the user 'test2' has signed out successfully. The terminal also shows a menu with options like 'Register', 'Sign in', 'Change password', 'Update account info', 'Reset program', 'View login history', and 'Sign out'. The user chose option 7, 'Sign out'.

```
account.txt
1  admin admin admin@gmail.com 0123456789 admin 1
2  namnk 1 namnk@gmail.com 0123456789 user 1
3  hungng 1 hungng@hust.edu 0123456789 user 1
4  locdinh locdinh123 123@gmail.com 0987654321 user 1
5  quangvn vnquang12 quangvn22@gmail.com 0987654321 user 1
6  test test test@gmail.com 0987654321 user 1
7  test2 newpassword test2new@gmail.com 0123456789 user 1
8

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
test2 | 2025-09-24 | 23:22:42
===== User Management Program =====
User session: test2
1. Register
2. Sign in
3. Change password
4. Update account info
5. Reset program
6. View login history
7. Sign out
Your choice (1-7, other to quit): 7
User test2 signed out successfully.
```


Admin mode



The screenshot shows a code editor with several tabs: `Makefile`, `account.txt` (active), `lab_w1.c`, `history.txt`, and `build.bat`. The `account.txt` tab contains a list of user accounts:

```
1 admin admin admin@gmail.com 0123456789 admin 1
2 namnk 1 namnk@gmail.com 0123456789 user 1
3 hungng 1 hungng@hust.edu 0123456789 user 1
4 locdinh locdinh123 123@gmail.com 0987654321 user 1
5 quangvn vnquang12 quangvn22@gmail.com 0987654321 user 1
6 test test test@gmail.com 0987654321 user 1
7 test2 newpassword test2new@email.com 0123456789 user 1
```

Below the code editor is a terminal window titled `lab_w1`. It displays the output of a program:

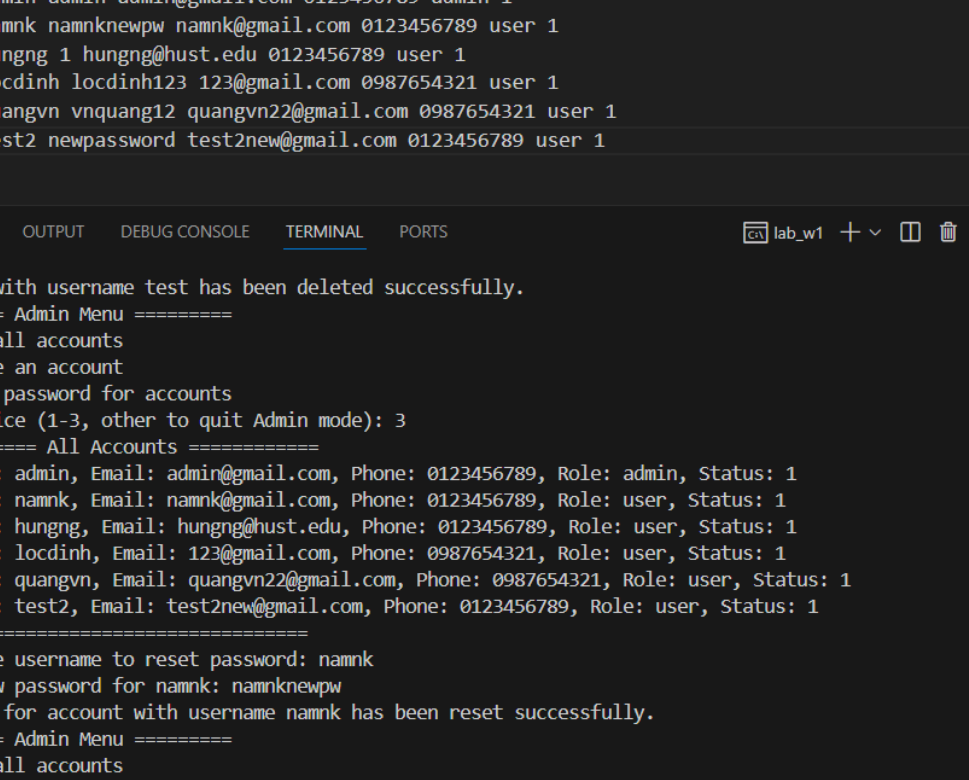
```
===== User Management Program =====
1. Register
2. Sign in
3. Change password
4. Update account info
5. Reset program
6. View login history
7. Sign out
Your choice (1-7, other to quit): 2
Username: admin
Password: admin
Admin mode activated.
Welcome admin
===== Admin Menu =====
1. View all accounts
2. Delete an account
3. Reset password for accounts
Your choice (1-3, other to quit Admin mode):
```

```
Makefile account.txt lab_w1.c history.txt build.bat
```

```
account.txt  
1 admin admin admin@gmail.com 0123456789 admin 1  
2 namnk 1 namnk@gmail.com 0123456789 user 1  
3 hungng 1 hungng@hust.edu 0123456789 user 1  
4 locdinh locdinh123 123@gmail.com 0987654321 user 1  
5 quangvn vnquang12 quangvn22@gmail.com 0987654321 user 1  
6 test test test@gmail.com 0987654321 user 1  
7 test2 newpassword test2new@gmail.com 0123456789 user 1  
8  
  
Problems Output Debug Console TERMINAL Ports  
lab_w1 + - [ ] [X] ... [ ] [X]  
Password: admin  
Admin mode activated.  
Welcome admin  
===== Admin Menu =====  
1. View all accounts  
2. Delete an account  
3. Reset password for accounts  
Your choice (1-3, other to quit Admin mode): 1  
===== All Accounts =====  
Username: admin, Email: admin@gmail.com, Phone: 0123456789, Role: admin, Status: 1  
Username: namnk, Email: namnk@gmail.com, Phone: 0123456789, Role: user, Status: 1  
Username: hungng, Email: hungng@hust.edu, Phone: 0123456789, Role: user, Status: 1  
Username: locdinh, Email: 123@gmail.com, Phone: 0987654321, Role: user, Status: 1  
Username: quangvn, Email: quangvn22@gmail.com, Phone: 0987654321, Role: user, Status: 1  
Username: test, Email: test@gmail.com, Phone: 0987654321, Role: user, Status: 1  
Username: test2, Email: test2new@gmail.com, Phone: 0123456789, Role: user, Status: 1  
===== Admin Menu =====  
1. View all accounts  
2. Delete an account  
3. Reset password for accounts  
Your choice (1-3, other to quit Admin mode):
```

The screenshot shows the Visual Studio Code interface with five tabs open at the top: "Makefile", "account.txt", "lab_w1.c", "history.txt", and "build.bat". The "account.txt" tab is active, displaying a list of six user accounts in a plain text format:

```
1 admin admin@gmail.com 0123456789 admin 1  
2 namnk 1 namnk@gmail.com 0123456789 user 1  
3 hungng 1 hungng@hust.edu 0123456789 user 1  
4 locdinh locdinh123 123@gmail.com 0987654321 user 1  
5 quangvn vnquang12 quangvn22@gmail.com 0987654321 user 1  
6 test2 newpassword test2new@gmail.com 0123456789 user 1  
7
```



```
Makefile account.txt lab_w1.c history.txt build.bat
account.txt
1 admin admin@gmail.com 0123456789 admin 1
2 namnk namnknewpw namnk@gmail.com 0123456789 user 1
3 hungng 1 hungng@hust.edu 0123456789 user 1
4 locdinh locdinh123 123@gmail.com 0987654321 user 1
5 quangvn vnquang12 quangvn22@gmail.com 0987654321 user 1
6 test2 newpassword test2new@gmail.com 0123456789 user 1
7

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
Account with username test has been deleted successfully.
===== Admin Menu =====
1. View all accounts
2. Delete an account
3. Reset password for accounts
Your choice (1-3, other to quit Admin mode): 3
===== All Accounts =====
Username: admin, Email: admin@gmail.com, Phone: 0123456789, Role: admin, Status: 1
Username: namnk, Email: namnk@gmail.com, Phone: 0123456789, Role: user, Status: 1
Username: hungng, Email: hungng@hust.edu, Phone: 0123456789, Role: user, Status: 1
Username: locdinh, Email: 123@gmail.com, Phone: 0987654321, Role: user, Status: 1
Username: quangvn, Email: quangvn22@gmail.com, Phone: 0987654321, Role: user, Status: 1
Username: test2, Email: test2new@gmail.com, Phone: 0123456789, Role: user, Status: 1
=====
Enter the username to reset password: namnk
Enter new password for namnk: namnknewpw
Password for account with username namnk has been reset successfully.
===== Admin Menu =====
1. View all accounts
2. Delete an account
3. Reset password for accounts
Your choice (1-3, other to quit Admin mode):
```

Makefileaccount.txt Xlab_w1.chistory.txtbuild.bat

account.txt

1 admin admin123 admin@gmail.com 0123456789 admin 1
2 namnk namnknewpw namnk@gmail.com 0123456789 user 1
3 hungng 1 hungng@hust.edu 0123456789 user 1
4 locdinh locdinh123 123@gmail.com 0987654321 user 1
5 quangvn vnquang12 quangvn22@gmail.com 0987654321 user 1
6 test2 newpassword test2new@gmail.com 0123456789 user 1
7

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

lab_w1

==== Admin Menu =====
1. View all accounts
2. Delete an account
3. Reset password for accounts
Your choice (1-3, other to quit Admin mode): 3
===== All Accounts =====
Username: admin, Email: admin@gmail.com, Phone: 0123456789, Role: admin, Status: 1
Username: namnk, Email: namnk@gmail.com, Phone: 0123456789, Role: user, Status: 1
Username: hungng, Email: hungng@hust.edu, Phone: 0123456789, Role: user, Status: 1
Username: locdinh, Email: 123@gmail.com, Phone: 0987654321, Role: user, Status: 1
Username: quangvn, Email: quangvn22@gmail.com, Phone: 0987654321, Role: user, Status: 1
Username: test2, Email: test2new@gmail.com, Phone: 0123456789, Role: user, Status: 1
=====
Enter the username to reset password: admin
Be careful. Changing ADMIN password ?
1. Confirm
2. Cancel
1
Enter new password for admin: admin123
Password for account with username admin has been reset successfully.
===== Admin Menu =====
1. View all accounts
2. Delete an account
3. Reset password for accounts
Your choice (1-3, other to quit Admin mode):

Ln 6, Col 1 Spaces: 4