

GROUP 7

B.D.A.P

User Documentation

CONTENTS

| | |
|----------------------------|-----------|
| Precautions | 2 |
| - Don'ts of the program | 2 |
| Installation | 2 |
| - How to Compile and Run | 2 |
| Before you start | 3 |
| - User Interface Structure | 3 |
| Initial Use | 4 |
| - Register Admin | 4 |
| General Operations | 6 |
| - Login | 6 |
| - Change password | 8 |
| Admin Operations | 10 |
| - Create user account | 10 |
| - Delete user account | 13 |
| - Change user password | 16 |
| Buyer Operations | 19 |
| - Statistical Analysis | 19 |
| - Select Row, Column | 21, 22 |
| - Save Data file | 25 |
| - Save Report | 26 |
| - Text, HTML | 27, 28 |

PRECAUTIONS

Don'ts of the program

- △ Do not delete or modify any of the **.dat** files under the **src/.dat/** folder except for your own datafile-to-analyse.
- △ Do not use any file extensions other than **.dat** for your data.

INSTALLATION

How to Compile and Run

Option 1: Run the pre-compiled program.

```
cd src/ && && ./BDAP
```

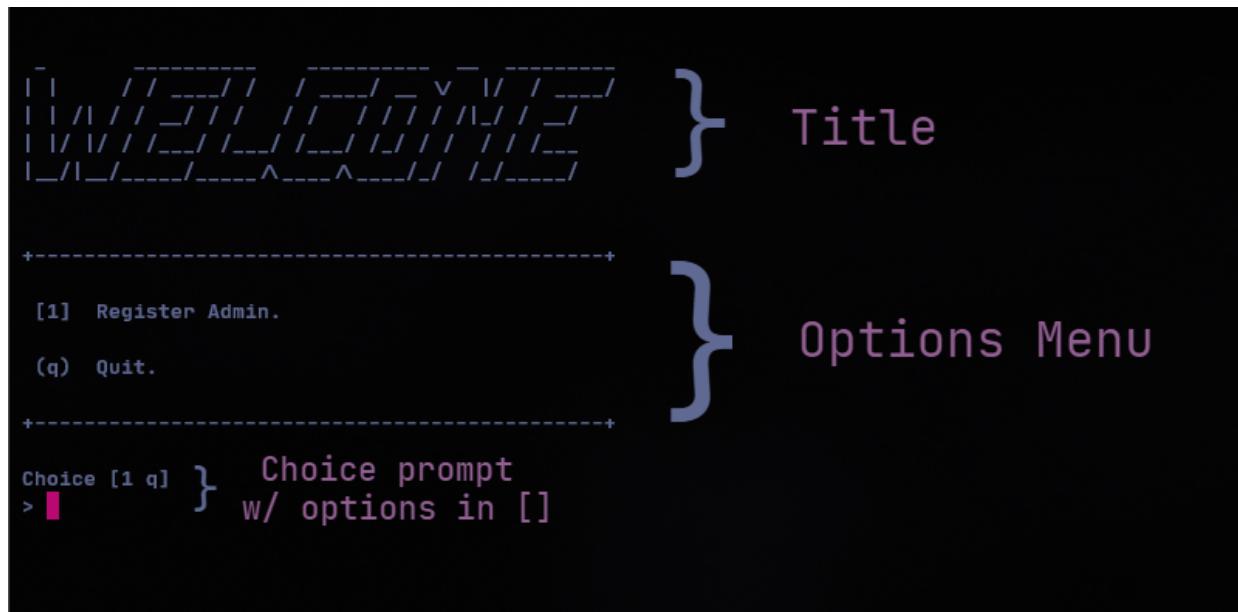
Option 2: Compile and Run the program

```
cd src/ && g++ BDAP.cpp -o BDAP && ./BDAP
```

BEFORE YOU START

**** Refer to README.md first before you continue****

User Interface Structure



Title: Indicates the page or functionality we're in

Options Menu : Shows the different options of a functionality.

Choice Prompt: Prompts the user for input, with the options beside it.

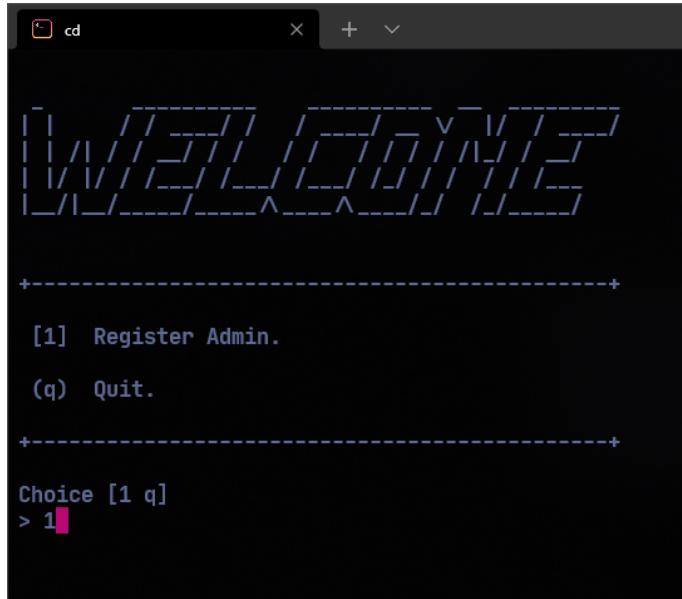


Messages: These messages are shown at the bottom of the screen for a few second(s) to indicate the state of the program. The user is expected not to input anything whilst the message is being shown.

INITIAL USE

Registering an Admin

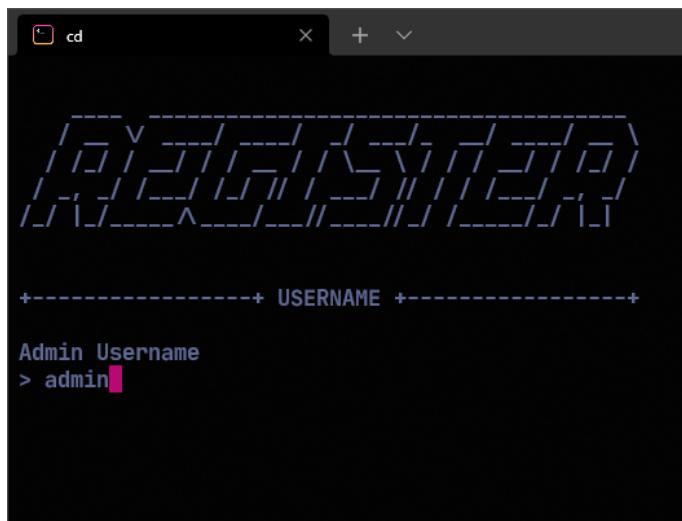
1. Select Register Admin, Input: 1



```
[1] Register Admin.  
(q) Quit.  
Choice [1 q]  
> 1
```

A screenshot of a terminal window titled "cd". The window contains a menu with two options: "[1] Register Admin." and "(q) Quit.". Below the menu, there is a prompt "Choice [1 q]" followed by the user input "> 1". The input "1" is highlighted with a pink rectangle.

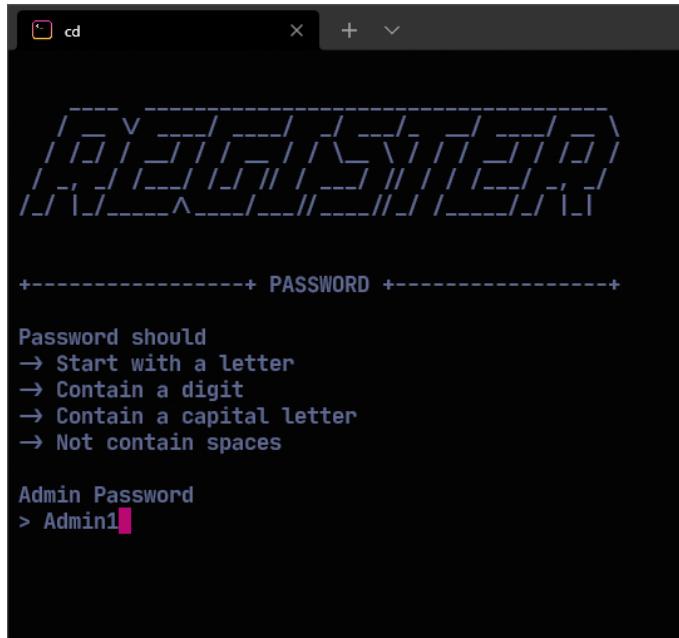
2. Enter Admin Username



```
+-----+ USERNAME +-----+  
Admin Username  
> admin
```

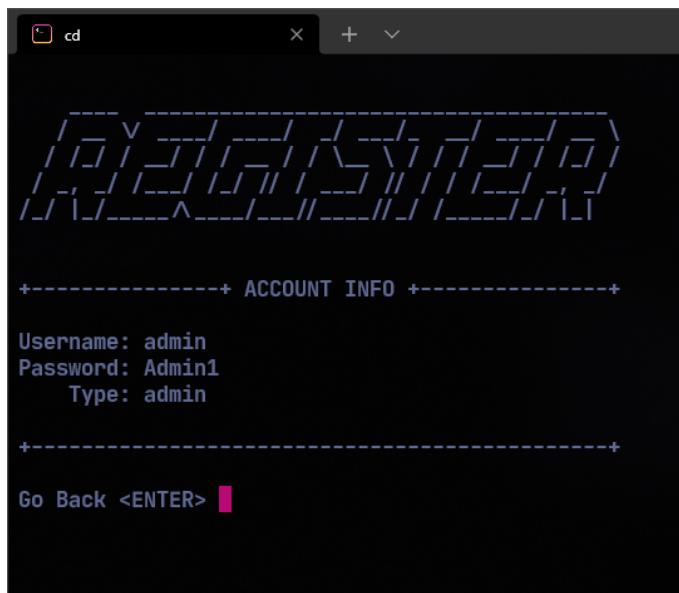
A screenshot of a terminal window titled "cd". The window shows a command-line interface where the user has entered "admin" as the admin username. The input "admin" is highlighted with a pink rectangle.

3. Enter Admin Password



```
cd
+-----+ PASSWORD +-----+
Password should
→ Start with a letter
→ Contain a digit
→ Contain a capital letter
→ Not contain spaces
Admin Password
> Admin1
```

4. Go back to the Welcome Page. Input: <ENTER>

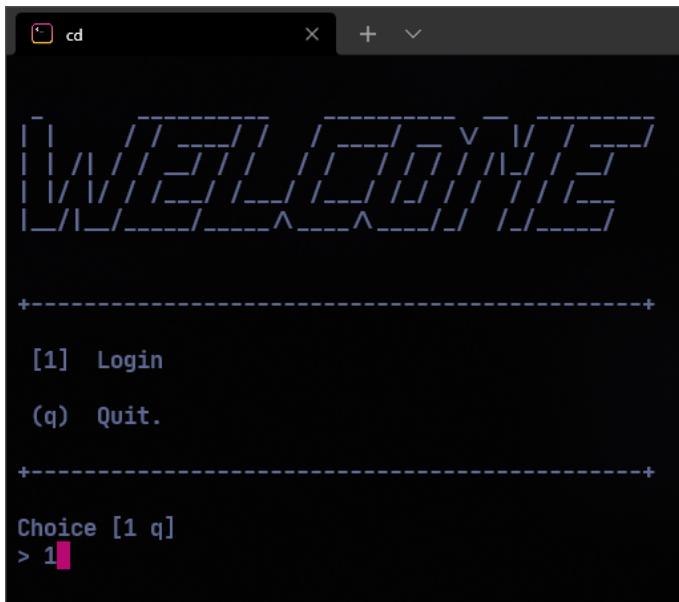


```
cd
+-----+ ACCOUNT INFO +-----+
Username: admin
Password: Admin1
Type: admin
+-----+
Go Back <ENTER> █
```

GENERAL OPERATIONS

Login

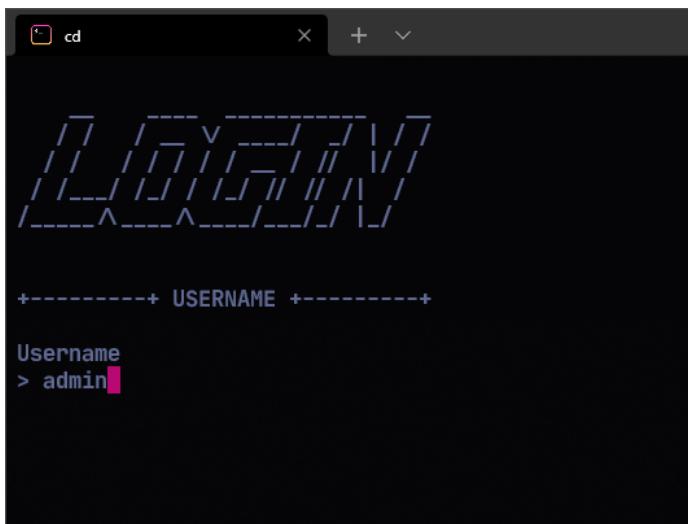
1. Select Register Admin, Input: 1



```
cd
[1] Login
(q) Quit.

Choice [1 q]
> 1
```

2. Enter Username



```
cd
-----+ USERNAME +-----
Username
> admin
```

3. Enter Password

```
[cd] x + < -> [ ]  
[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]  
[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]  
[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]  
[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]  
+-----+ USERNAME +-----+  
Username  
> admin  
  
+-----+ PASSWORD +-----+  
Password  
> Admin1
```

4. Wait to be redirected to the Main Menu.

```
cd

+-----+ USERNAME +-----+
Username
> admin

+-----+ PASSWORD +-----+
Password
> Admin1

STATUS: Logging in..
```

Change Password (similar for Admin & Buyer)

1. Select Manage Account, Input: 2

2. Select Change Password, Input: 1

3. Enter a New Password

The terminal window shows a password creation interface. It includes a decorative header made of various symbols like /, \, |, and V. Below it, a dashed box labeled "NEW PASSWORD" contains the following text:

```
-----+ NEW PASSWORD +-----+
Password should
→ Start with a letter
→ Contain a digit
→ Contain a capital letter
→ Not contain spaces
```

Below this, the prompt "New Password" is followed by the user input "USER1".

4. Change the password and go back. Input: <ENTER>

The terminal window shows a password creation interface. It includes a decorative header made of various symbols like /, \, |, and V. Below it, a dashed box labeled "NEW PASSWORD" contains the following text:

```
-----+ NEW PASSWORD +-----+
Password should
→ Start with a letter
→ Contain a digit
→ Contain a capital letter
→ Not contain spaces
```

Below this, the prompt "New Password" is followed by the user input "USER1".

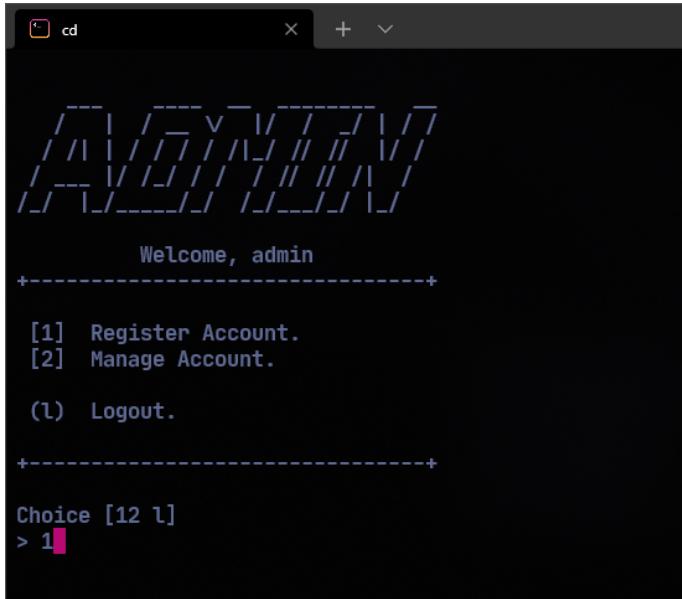
At the bottom of the window, a new message reads:

```
+-----+
Change password for the user, user <ENTER> ■
```

ADMIN OPERATIONS

Create User Account

1. Select Register Account. Input: 1



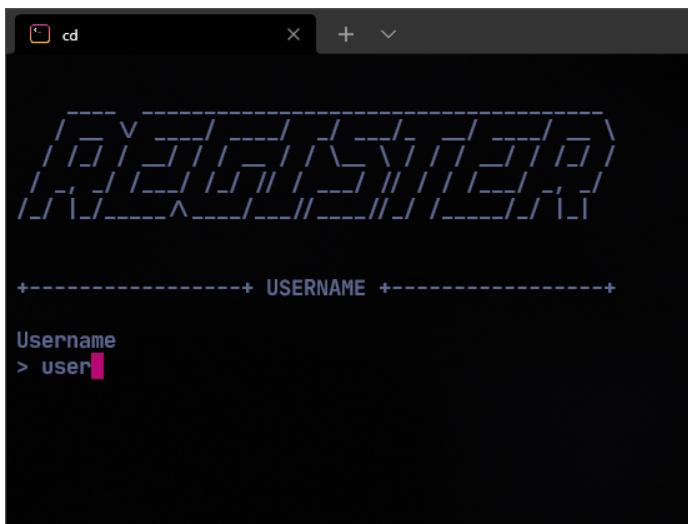
```
cd
x + v

Welcome, admin
+-----+
[1] Register Account.
[2] Manage Account.

(l) Logout.

+-----+
Choice [12 l]
> 1
```

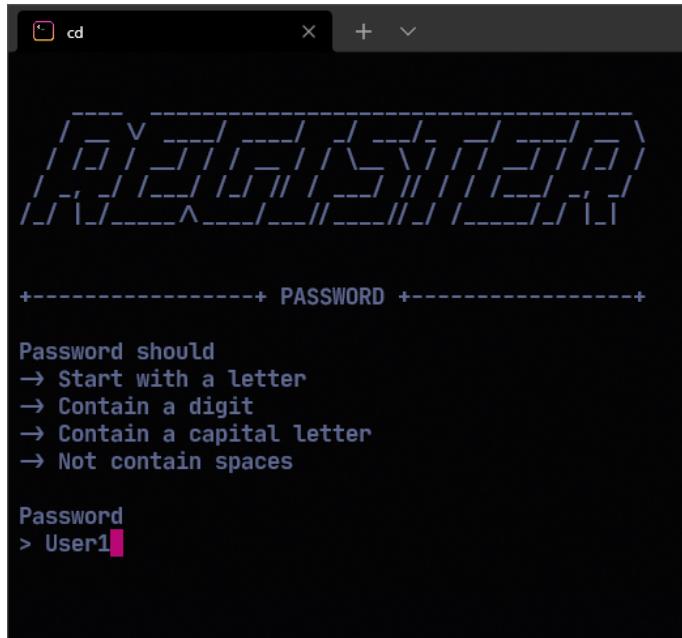
2. Enter a username.



```
cd
x + v

+-----+ USERNAME +-----+
Username
> user
```

3. Enter a Password.

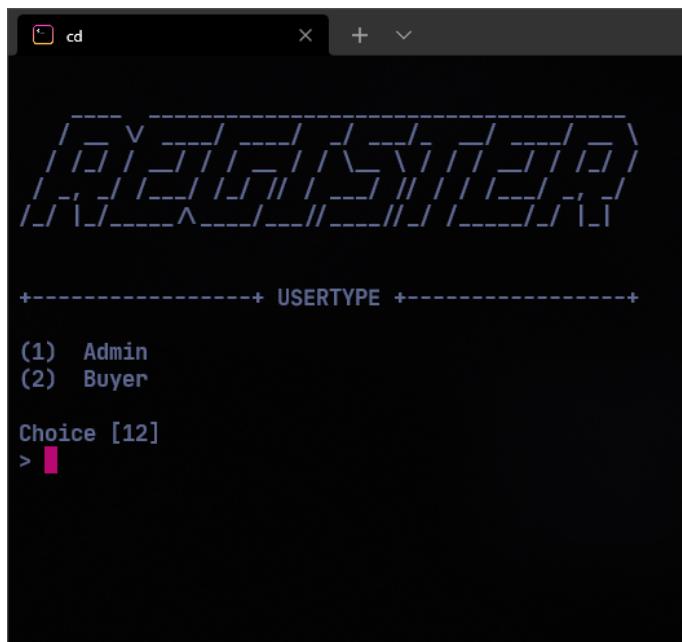


A terminal window titled "cd" with a dark background. It displays a password strength meter consisting of a grid of characters. Below the meter, a prompt "+-----+ PASSWORD +-----+" is shown. The text "Password should" is followed by a list of requirements: "→ Start with a letter", "→ Contain a digit", "→ Contain a capital letter", and "→ Not contain spaces". The user has entered "Password" and chosen "User1" as the password.

```
+-----+ PASSWORD +-----+
Password should
→ Start with a letter
→ Contain a digit
→ Contain a capital letter
→ Not contain spaces

Password
> User1
```

4. Select User Type.

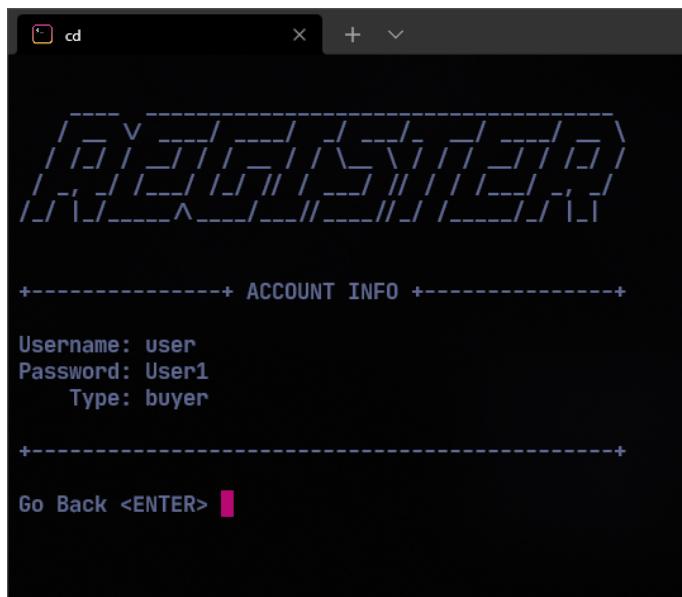


A terminal window titled "cd" with a dark background. It displays a user type selection menu with a password strength meter at the top. Below it, a prompt "+-----+ USERTYPE +-----+" is shown. The options "(1) Admin" and "(2) Buyer" are listed. The user has selected "Choice [12]" and chosen "Buyer" as the user type.

```
+-----+ USERTYPE +-----+
(1) Admin
(2) Buyer

Choice [12]
> Buyer
```

5. Go back to the Admin Main Menu. Input: <ENTER>



The screenshot shows a terminal window with a dark background. At the top, there is a navigation bar with icons for back, forward, and search, and the text "cd". Below this is a decorative banner made of various symbols like slashes and dots. The main content area starts with a section header "+-----+ ACCOUNT INFO +-----+". Underneath it, the following information is displayed:

```
Username: user
Password: User1
Type: buyer
```

Below this is another section header "+-----+". At the bottom of the window, the text "Go Back <ENTER>" is followed by a small pink rectangular button.

Delete User Account

1. Select Manage Account, Input: 2

2. Select Delete a User's Password. Input: 2

```
cd
+ -+
[1] Change Password (admin).
[2] Delete a User's Account.
[3] Change a User's Password.

(b) Back.

+ -+
Choice [123 b]
> █
```

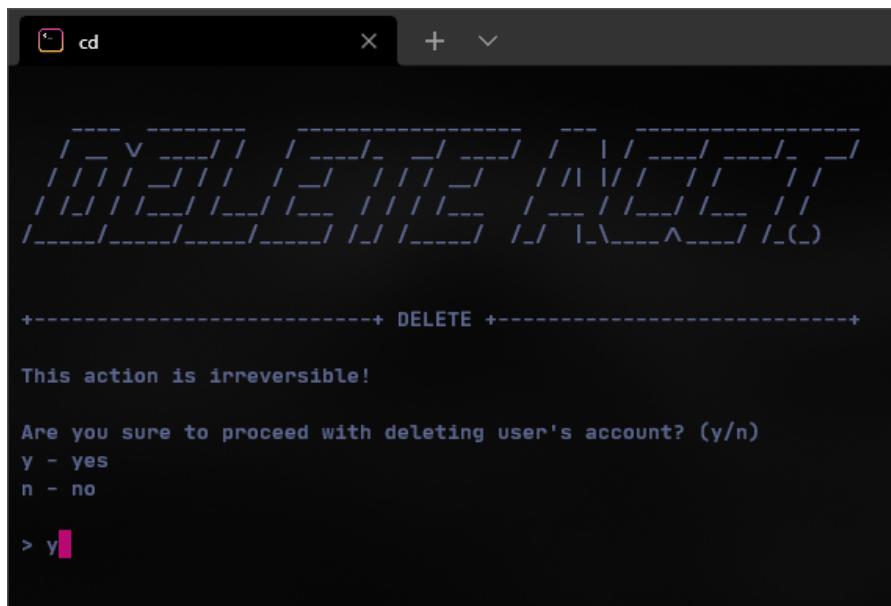
3. Enter the Username of User to Change Password.

```
cd
+-----+ USERNAME +-----+
Username (User to Delete)
> user
```

4. Continue with deleting user account. Input: <ENTER>

```
cd
+-----+ USERNAME +-----+
Username (User to Delete)
> user
+-----+
Delete user's account <ENTER>
```

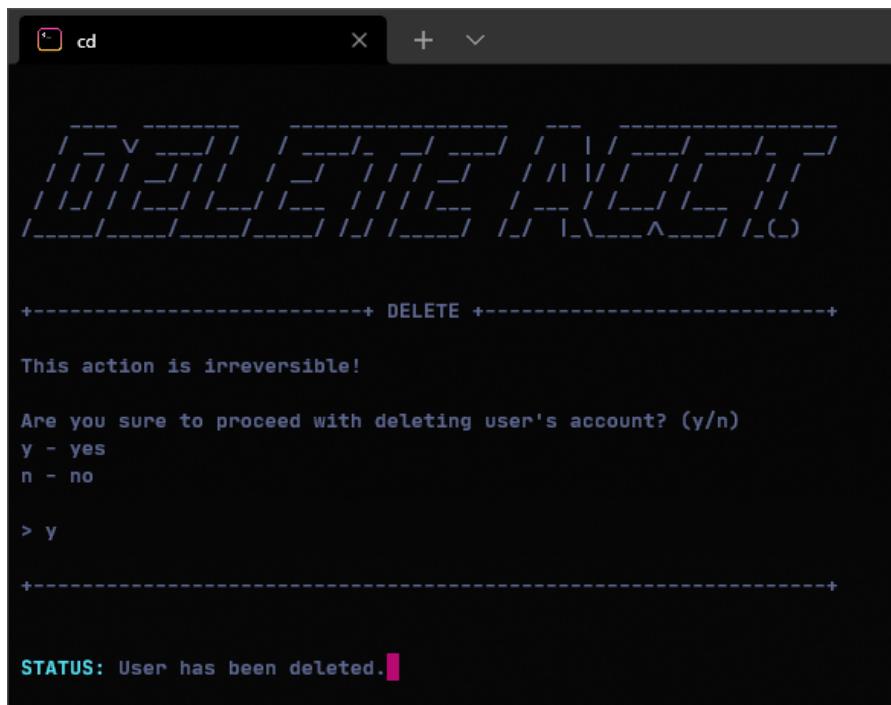
5. Confirm the deletion of the user. Input: y



A screenshot of a terminal window titled "cd". The window contains the following text:

```
+-----+ DELETE +-----+
This action is irreversible!
Are you sure to proceed with deleting user's account? (y/n)
y - yes
n - no
> y
```

6. Wait to be redirected back.

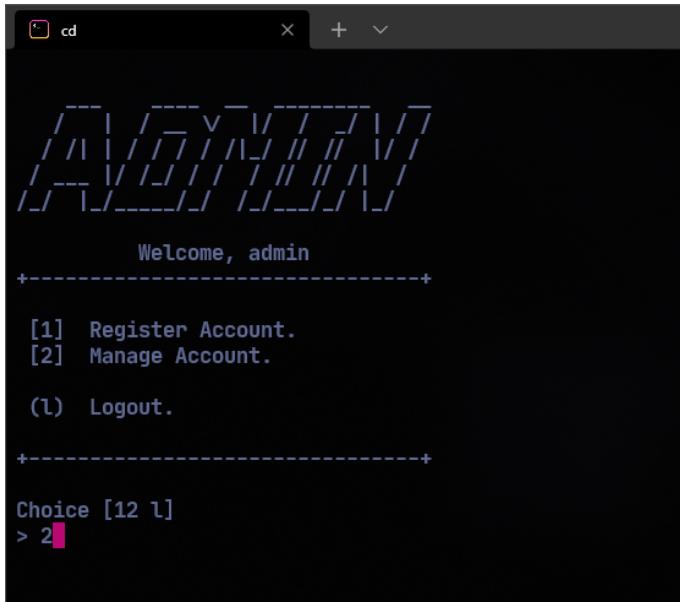


A screenshot of a terminal window titled "cd". The window contains the following text:

```
+-----+ DELETE +-----+
This action is irreversible!
Are you sure to proceed with deleting user's account? (y/n)
y - yes
n - no
> y
+-----+
STATUS: User has been deleted.
```

Change User Password

1. Select Manage Account. Input: 2

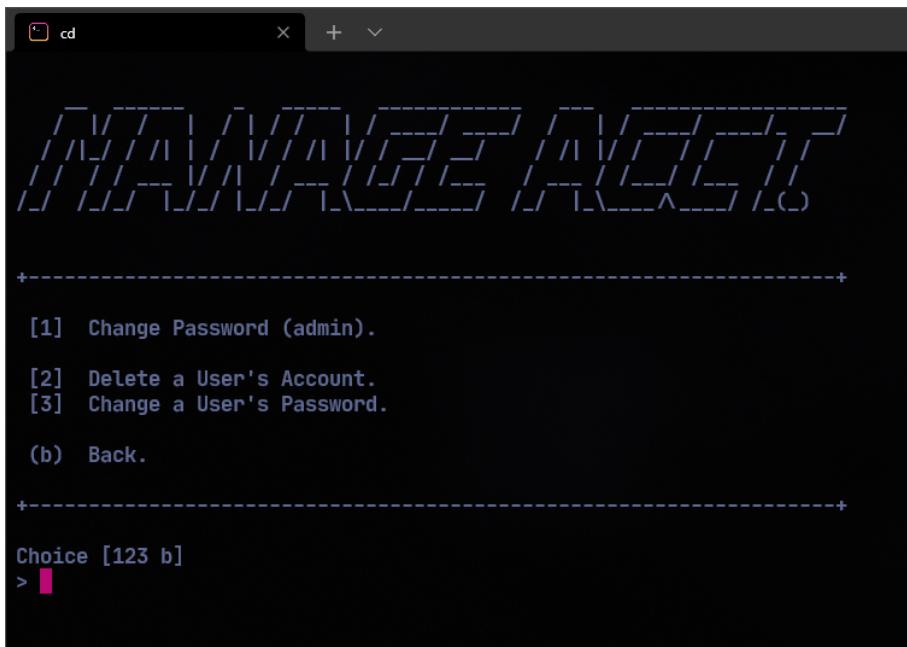


```
cd
-----
/---| /---\ \ /---| /---\ 
/ / | / / / \ / / / \ / / / 
/ /---| / / / / \ / / / / \ / / / 
-----+-----+
Welcome, admin
+-----+
[1] Register Account.
[2] Manage Account.

(l) Logout.

+-----+
Choice [12 l]
> 2
```

2. Select Change a User's Password. Input: 3

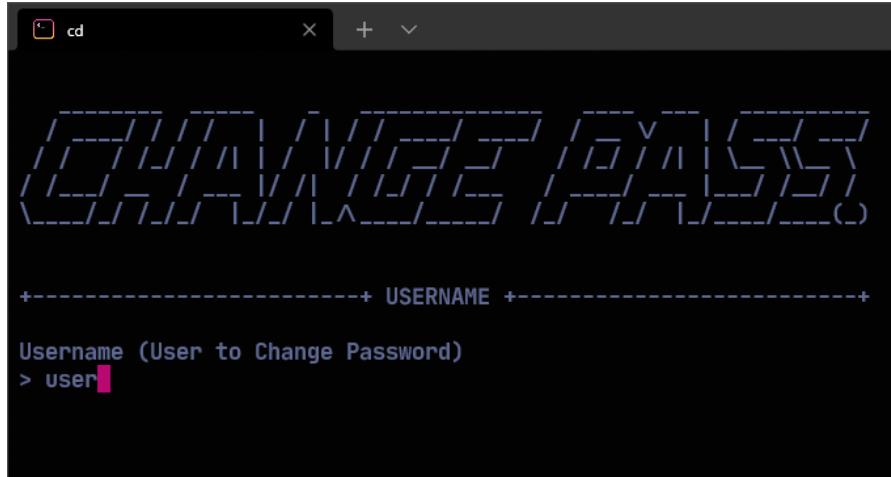


```
cd
-----
/---| /---\ \ /---| /---\ 
/ / | / / / \ / / / \ / / / 
/ /---| / / / / \ / / / / \ / / / 
-----+-----+
[1] Change Password (admin).
[2] Delete a User's Account.
[3] Change a User's Password.

(b) Back.

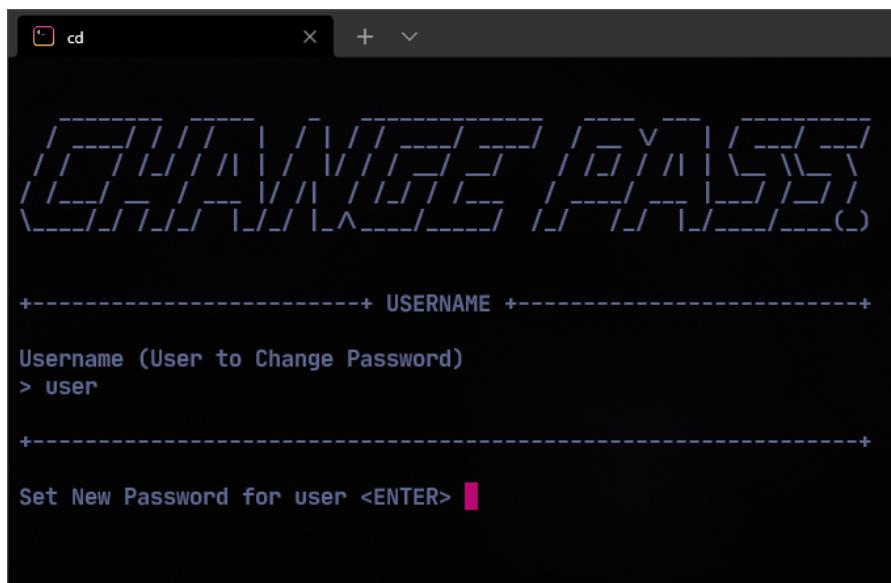
+-----+
Choice [123 b]
> 3
```

3. Enter the Username of User to Change Password.



```
cd
+-----+ USERNAME +-----+
Username (User to Change Password)
> user
```

4. Continue with setting a new password. Input: <ENTER>



```
cd
+-----+ USERNAME +-----+
Username (User to Change Password)
> user
+-----+
Set New Password for user <ENTER>
```

5. Enter a New Password for the User.

The terminal window shows a command-line interface. At the top, there's a bar with icons for file operations like 'cd' and 'ctrl+C'. The main area displays a series of dashed brackets forming a decorative pattern. Below this, a prompt '+-----+ NEW PASSWORD +-----+' appears. The terminal then lists password creation rules:
Password should
→ Start with a letter
→ Contain a digit
→ Contain a capital letter
→ Not contain spaces

Following the rules, the user enters a new password:
New Password
> USER1

6. Continue with changing the user password. Input: <ENTER>

The terminal window shows a command-line interface. At the top, there's a bar with icons for file operations like 'cd' and 'ctrl+C'. The main area displays a series of dashed brackets forming a decorative pattern. Below this, a prompt '+-----+ NEW PASSWORD +-----+' appears. The terminal then lists password creation rules:
Password should
→ Start with a letter
→ Contain a digit
→ Contain a capital letter
→ Not contain spaces

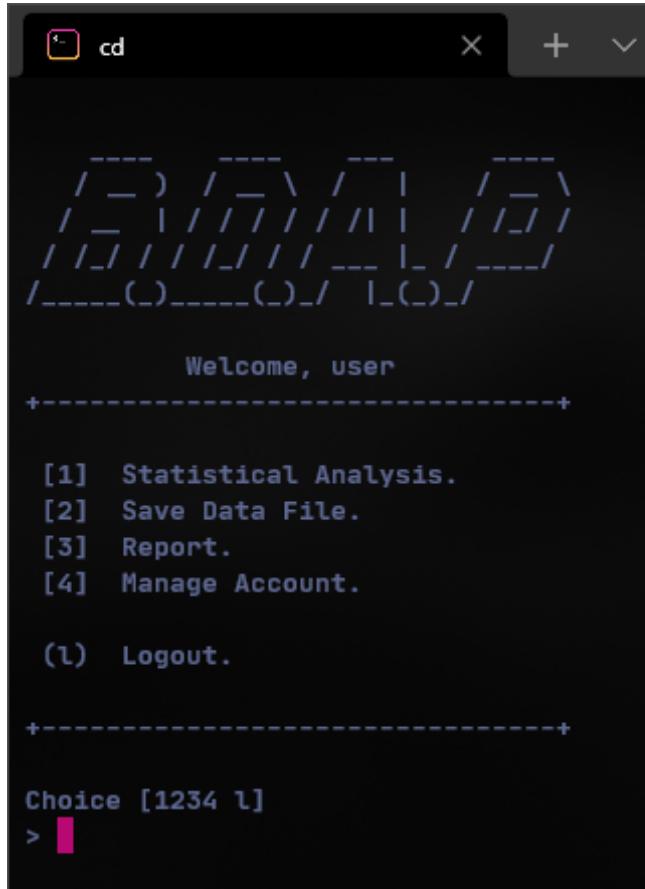
Following the rules, the user enters a new password:
New Password
> USER1

At the bottom, a confirmation prompt is shown:
+-----+
Change password for the user, user <ENTER> █

BUYER OPERATIONS

Statistical Analysis

1. Select Statistical Analysis. Input: 1



The screenshot shows a terminal window with a dark background and light-colored text. At the top, there's a header bar with a small icon, the text "cd", and three buttons: a close button (X), a plus sign (+), and a downward arrow (v). Below the header, there's some decorative ASCII art consisting of various symbols like slashes and underscores. Following this is a welcome message: "Welcome, user". A horizontal line follows, then a list of options:

- [1] Statistical Analysis.
- [2] Save Data File.
- [3] Report.
- [4] Manage Account.
- (l) Logout.

Another horizontal line follows, then the prompt "Choice [1234 l]" is displayed. A cursor, represented by a small red vertical bar, is positioned at the beginning of the input field.

2. Select any of the options.

```
cd
+ -+
/ _ _ / _ / | / _ / / / | / | / / / | / ^ v / _ / / _ / _ /
\ _ \ / / / | | / / / | / / \ ^ \ / / \ / \ / 
_ _ / / / _ _ | / / / _ _ | / / / / / / / / / / / / / / / / / / 
/ _ _ / _ / _ / ( ) / / _ / / _ / / / / / / / / / / / / / / / / / / 
+-----+
[1] Minimum.
[2] Maximum.
[3] Median.
[4] Mean.
[5] Variance.
[6] Standard Deviation.
[7] Pearson's Correlation.
[8] Distinct Data Member.
[9] Histogram.

(b) Back.

+-----+
Choice [12356789 b]
> 
```

Selecting Row

1. Select to compute Row. Input: 1

The terminal window shows a 10x10 grid of numbers from 1 to 100. Below the grid is a menu:

```
[1] Minimum of a Row.  
[2] Minimum of a Column.  
(b) Back.
```

The prompt "Choice [12 b]" is followed by a cursor at the beginning of the line.

2. Enter Row Number within the range in brackets.

The terminal window shows a 10x10 grid of numbers from 1 to 100. Below the grid is a prompt:

```
+-----+ ROW +-----+
```

The prompt "Row Number (1-10)" is followed by a cursor at the beginning of the line.

3. The computation is shown.

```
cd
+-----+-----+-----+-----+-----+
| / | / | / | / | / | / | / | / | / |
| / | / | / | / | / | / | / | / | / |
| / | / | / | / | / | / | / | / | / |
| / | / | / | / | / | / | / | / | / |
+-----+-----+-----+-----+-----+
Data: Row 1
| 12 | 17 | 94 | 15 |
Minimum: 12
+-----+-----+-----+-----+
```

Selecting Column

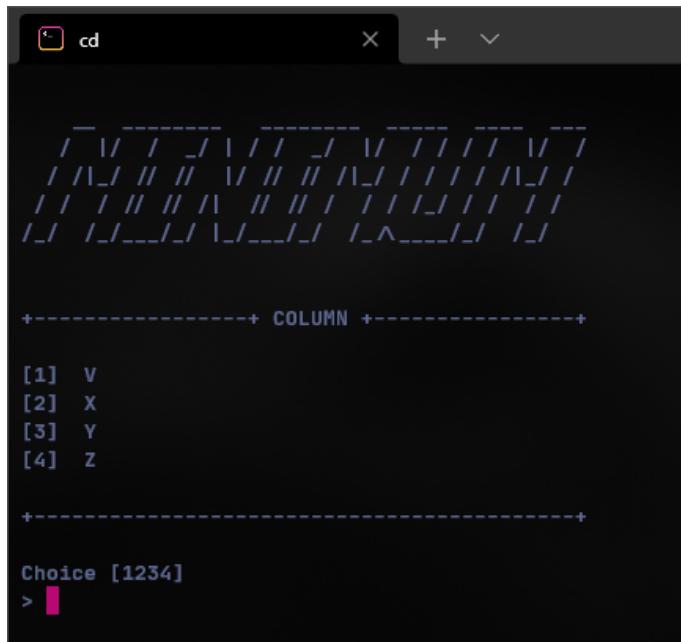
1. Select to compute Column. Input: 2

```
cd x + <input>
+-----+
[1] Minimum of a Row.
[2] Minimum of a Column.

(b) Back.

+-----+
Choice [12 b]
> <input>
```

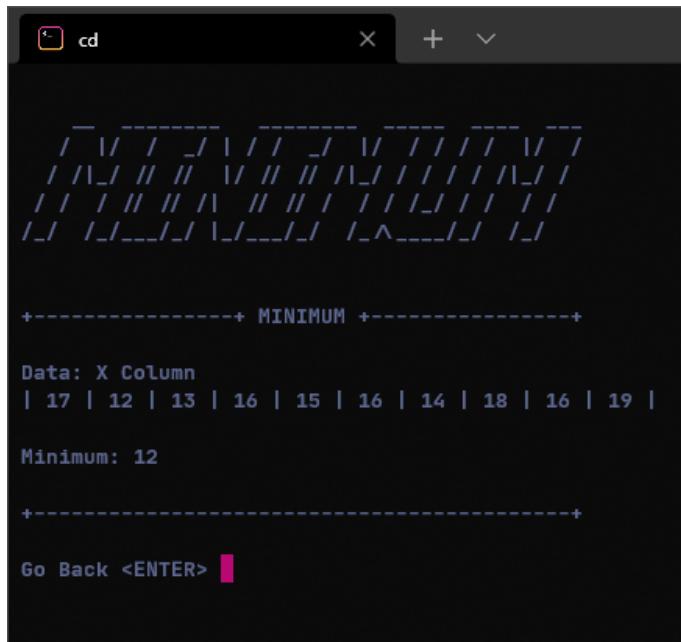
2. Select from the available Columns.



The screenshot shows a terminal window with the title bar 'cd'. The main area displays a grid of numbers and a menu:

```
+-----+ COLUMN +-----+
[1] V
[2] X
[3] Y
[4] Z
+-----+
Choice [1234]
> █
```

3. The computation is shown.



The screenshot shows a terminal window with the title bar 'cd'. The main area displays a grid of numbers and a computation result:

```
+-----+ MINIMUM +-----+
Data: X Column
| 17 | 12 | 13 | 16 | 15 | 16 | 14 | 18 | 16 | 19 |
Minimum: 12
+-----+
Go Back <ENTER> █
```

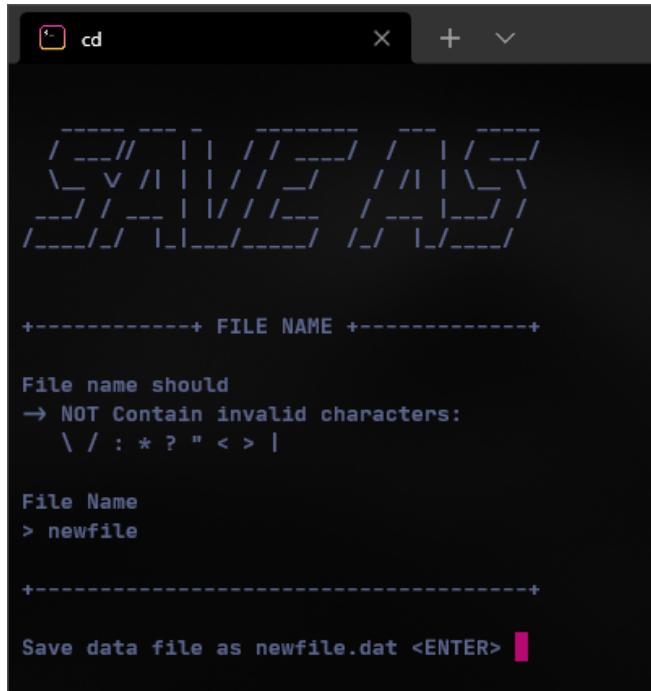
Save Data File

1. Select Save Data File. Input: 2

2. Enter a filename

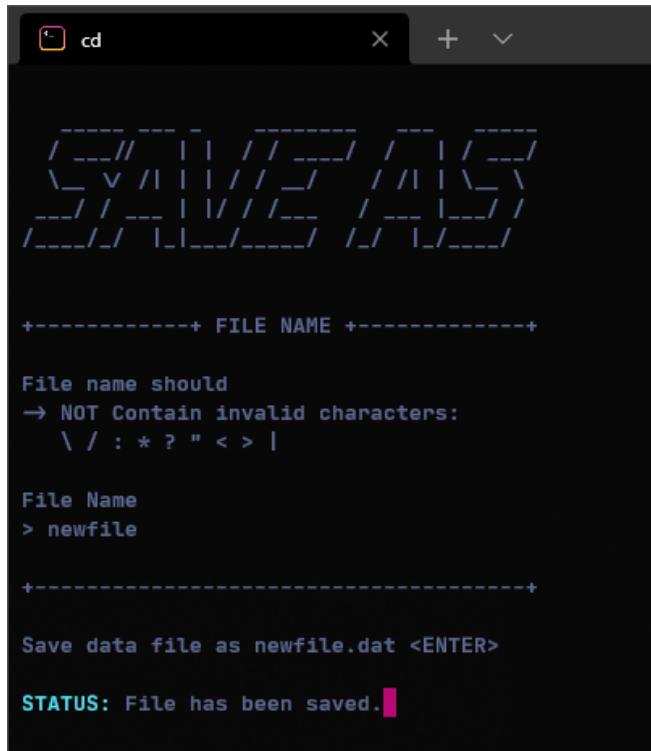
```
cd
-----+-----+-----+-----+-----+
\_\_v / | | | / / \_ / / | \_ \
---/ / ___ | | / / / ___ / / | ___ / /
-----/ / | | / / / -----/ / | / / -----
+-----+ FILE NAME +-----+
File name should
→ NOT Contain invalid characters:
  \ / : * ? " < > |
File Name
> newfile
```

3. Continue with saving the data file. Input: <ENTER>



```
/ _\ / | | / / _\ / / | / _\ /  
\_ \ / | | / / _\ / / | / _\ /  
\_ / / | | / / _\ / / | / _\ /  
/_ / / | | / / _\ / / | / _\ /  
  
+-----+ FILE NAME +-----+  
  
File name should  
→ NOT Contain invalid characters:  
  \ / : * ? " < > |  
  
File Name  
> newfile  
  
+-----+  
  
Save data file as newfile.dat <ENTER> █
```

4. Wait to be redirected to the Main Menu.



```
/ _\ / | | / / _\ / / | / _\ /  
\_ \ / | | / / _\ / / | / _\ /  
\_ / / | | / / _\ / / | / _\ /  
/_ / / | | / / _\ / / | / _\ /  
  
+-----+ FILE NAME +-----+  
  
File name should  
→ NOT Contain invalid characters:  
  \ / : * ? " < > |  
  
File Name  
> newfile  
  
+-----+  
  
Save data file as newfile.dat <ENTER>  
  
STATUS: File has been saved. █
```

Save Report

1. Select Report. Input: 3

```
cd
-----
/ _ ) / _ \ / _ | / _ \
/ _ | / / / / / | / / /
/ _/ / / _/ / / _ | / _/
/ _(_)_/_(_)_/_(_)_/_(_)/

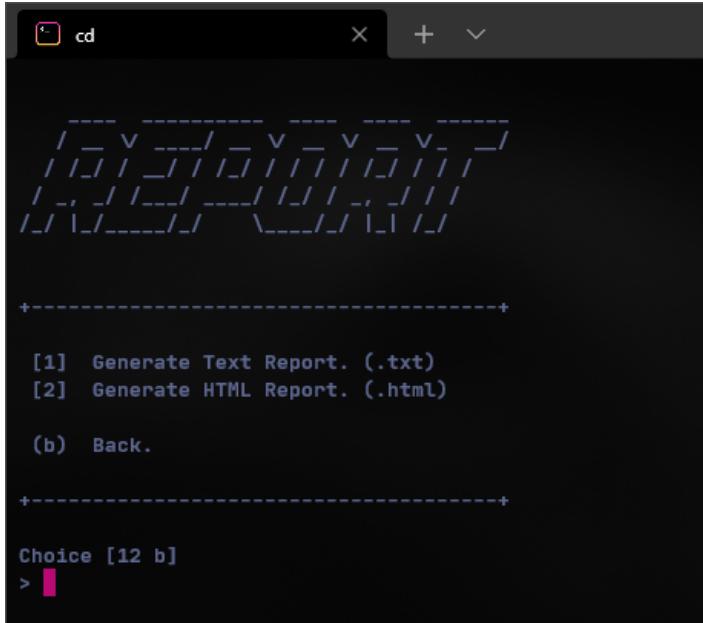
Welcome, user
+-----+
[1] Statistical Analysis.
[2] Save Data File.
[3] Report.
[4] Manage Account.

(l) Logout.

+-----+
Choice [1234 l]
> █
```

Generating Text Report

1. Select Generate Text Report. Input: 1



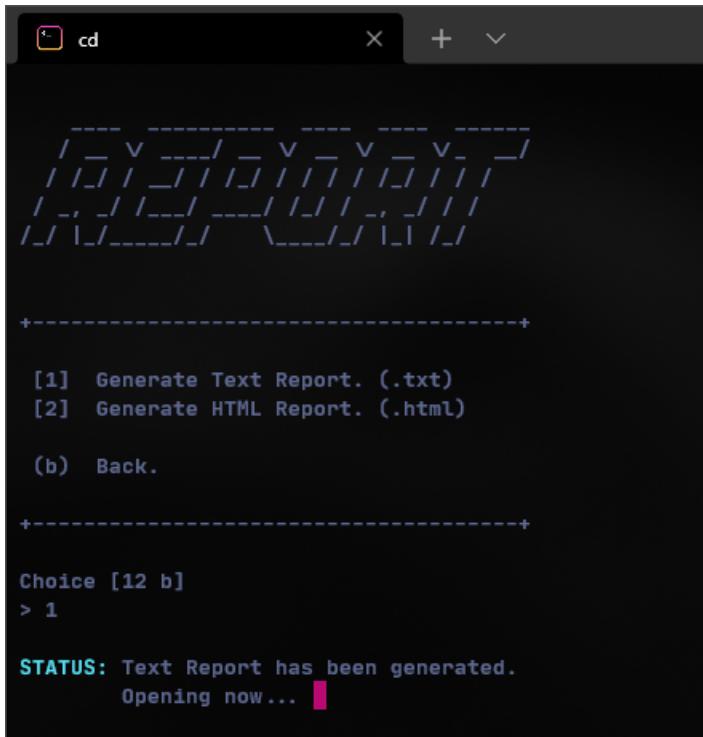
```
cd
[1] Generate Text Report. (.txt)
[2] Generate HTML Report. (.html)
(b) Back.

Choice [12 b]
> 
```

2. Wait for the Text Report to open automatically.

or

To open manually, go to /reports folder and look for the file:
reports-{your username}.txt



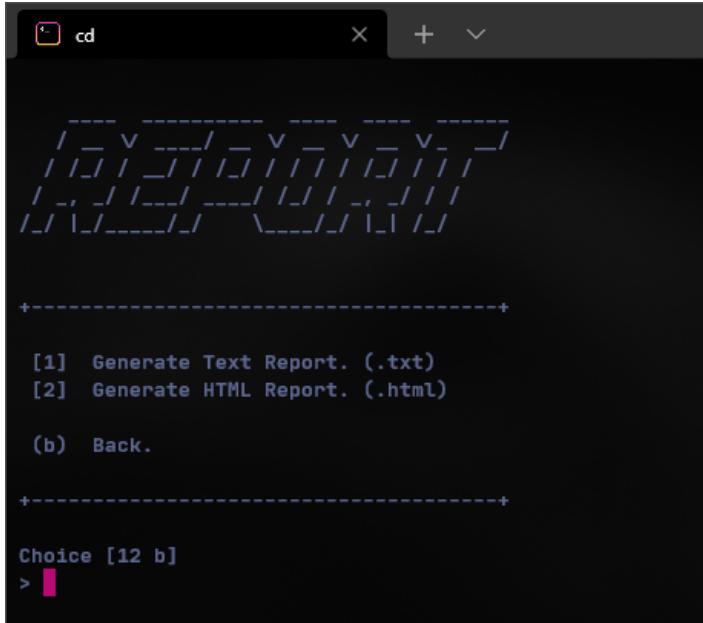
```
cd
[1] Generate Text Report. (.txt)
[2] Generate HTML Report. (.html)
(b) Back.

Choice [12 b]
> 1

STATUS: Text Report has been generated.
Opening now... 
```

Generating HTML Report

1. Select Generate HTML Report. Input: 1



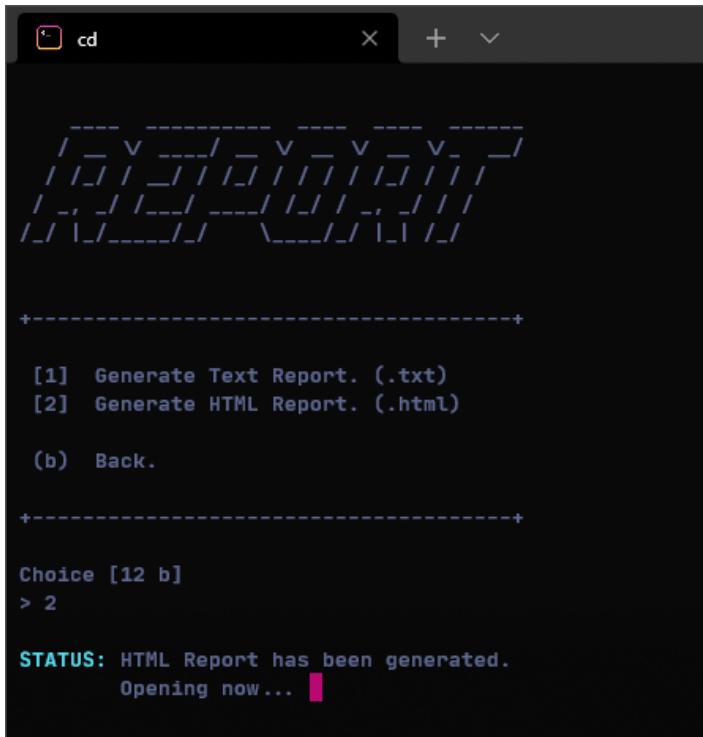
```
cd
[1] Generate Text Report. (.txt)
[2] Generate HTML Report. (.html)
(b) Back.

Choice [12 b]
> 1
```

2. Wait for the Text Report to open automatically.

or

To open manually, go to /reports folder and look for the file:
reports-{your username}.html



```
cd
[1] Generate Text Report. (.txt)
[2] Generate HTML Report. (.html)
(b) Back.

Choice [12 b]
> 2

STATUS: HTML Report has been generated.
Opening now... 2
```