

ATM SIMULATOR

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A BRIEF OVERVIEW

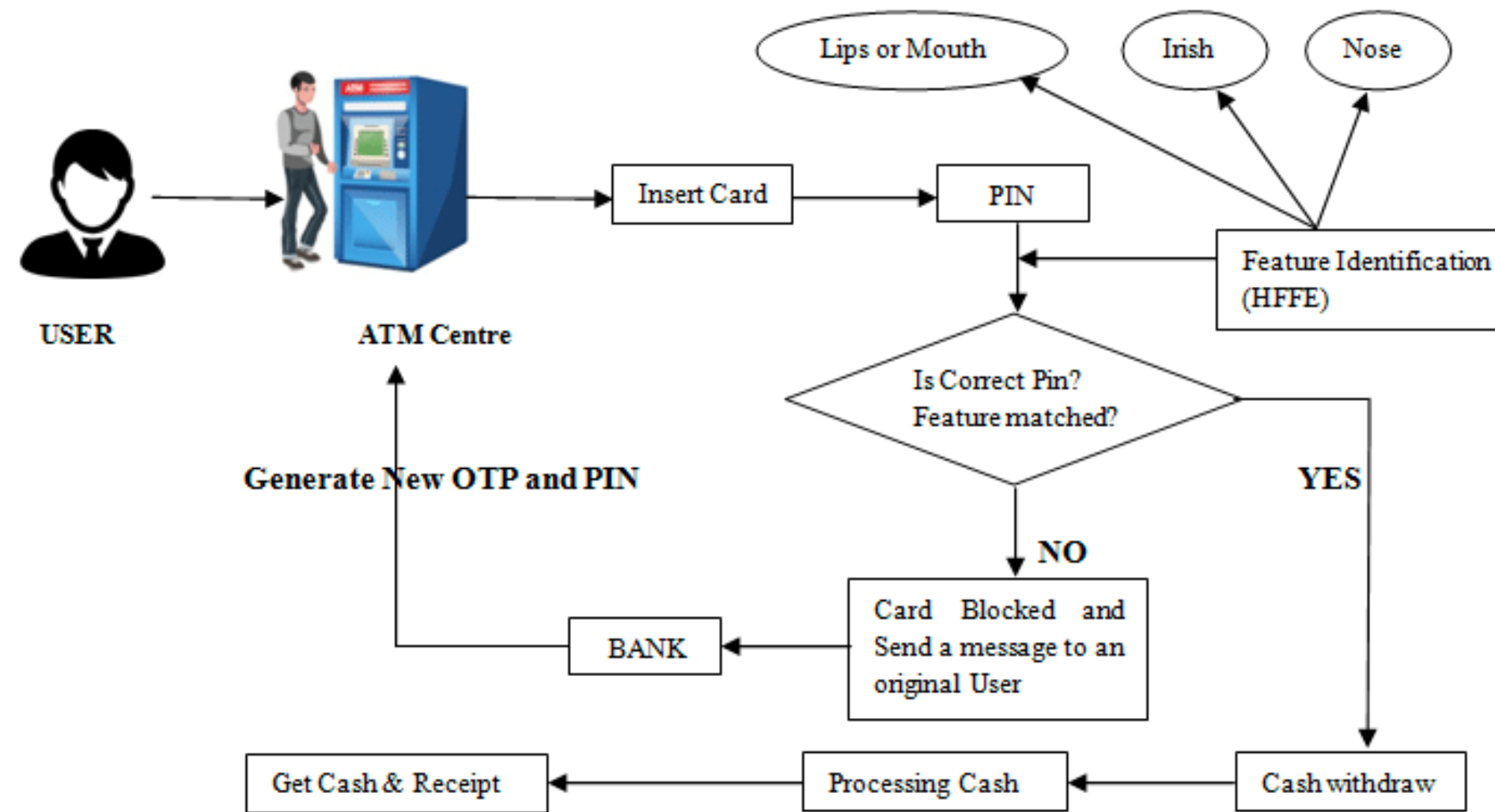
The ATM, Automated Teller Machine is built with the aim of making banking easier for the common man irrespective of their age, educational qualification and so on.

This product provides bank customers with a multitude of features including Money Withdrawal, Bank Account Balance Check, and ATM pin modification in a safe and secure manner.

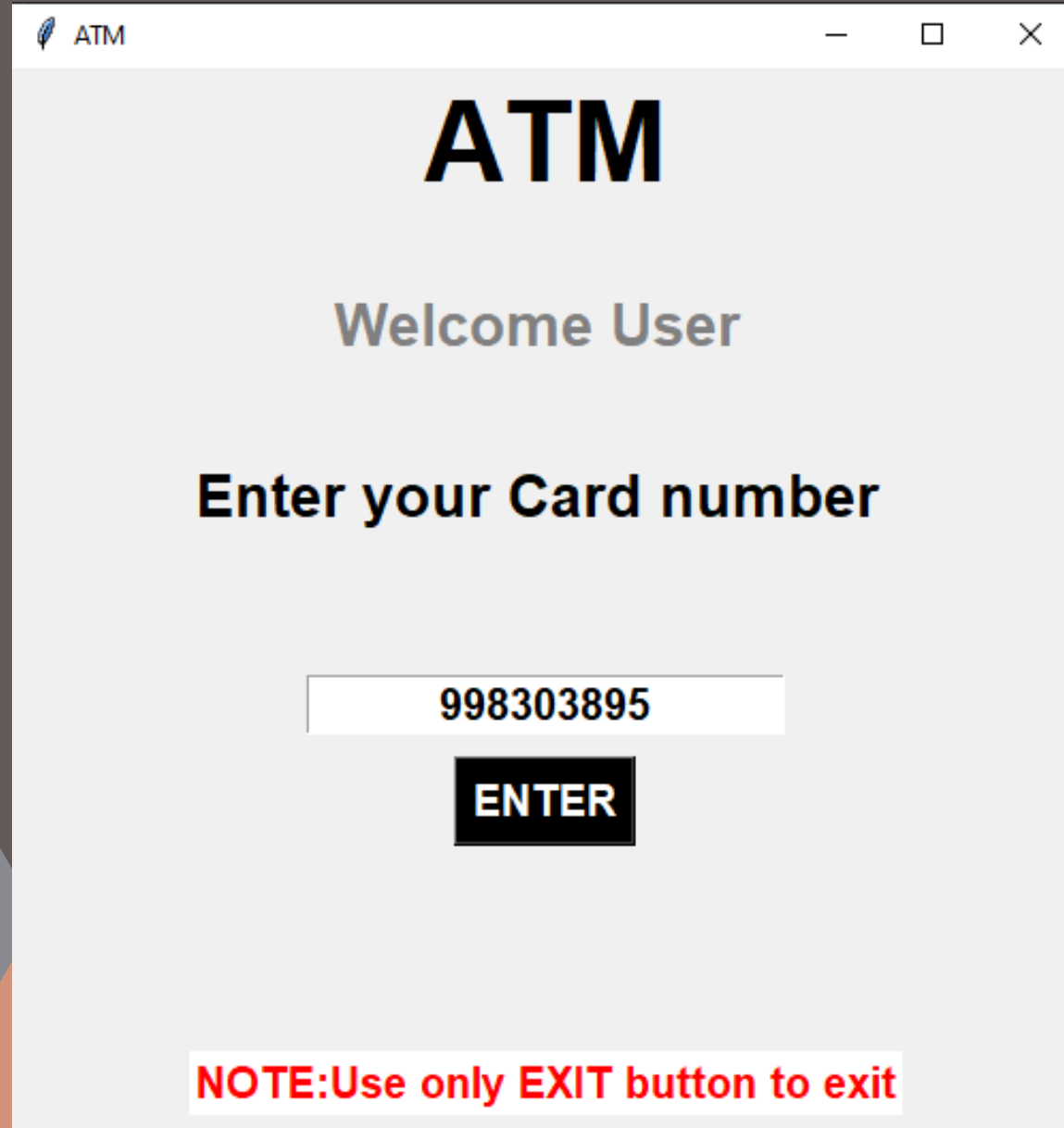
The project will be built using Python for handling the core operation of the machine.

Our main aim for the product is seamless user experience for the customer with secure communication, that will make their banking easy.

ARCHITECTURE DIAGRAM



OUTPUT



ATM

Welcome User

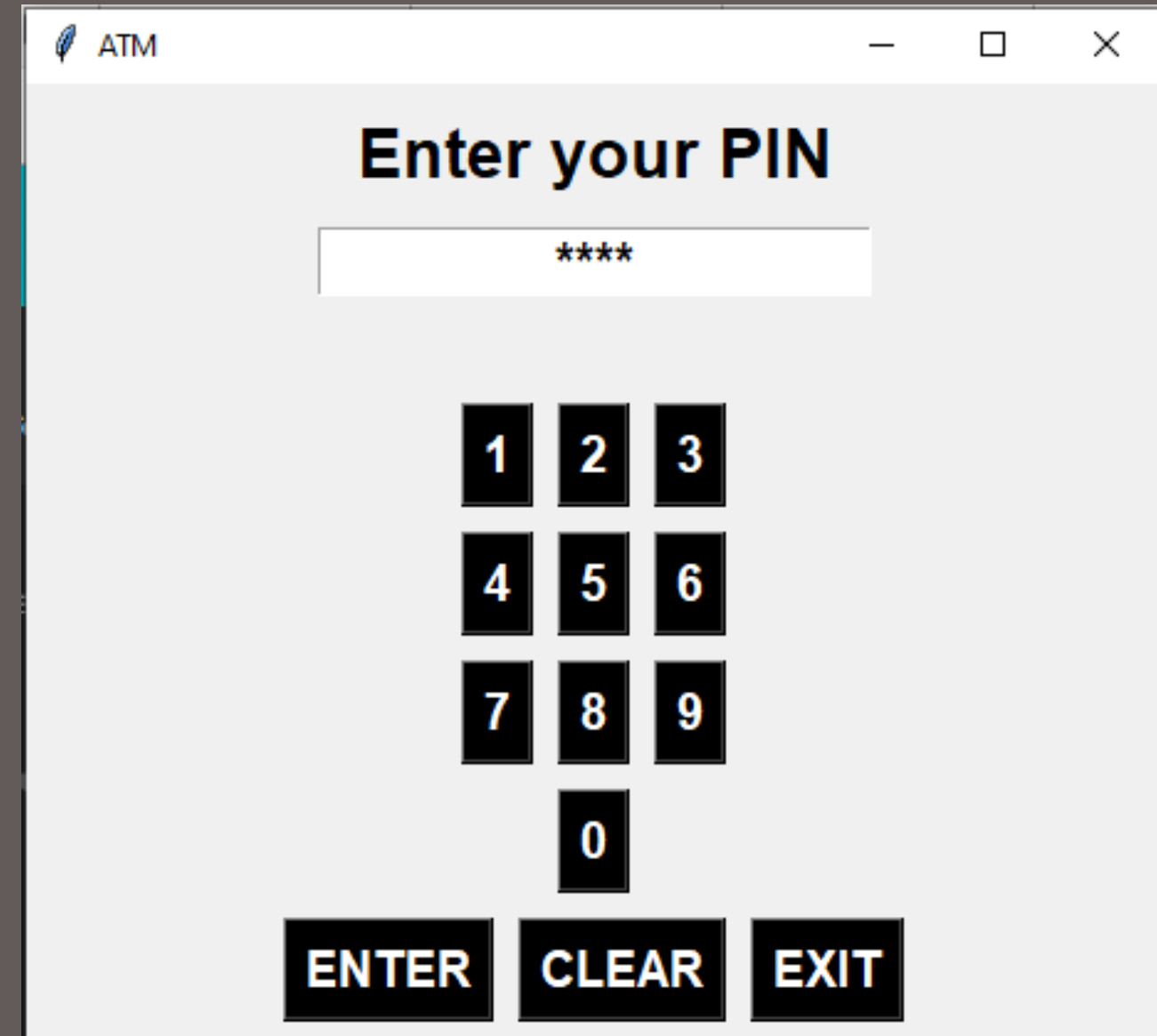
Enter your Card number

998303895

ENTER

NOTE: Use only EXIT button to exit

The image shows a web browser window titled 'ATM'. The main heading is 'ATM' in large bold letters. Below it is 'Welcome User'. The instruction 'Enter your Card number' is followed by a text input field containing '998303895' and a black button labeled 'ENTER'. At the bottom, a red text note says 'NOTE: Use only EXIT button to exit'.



ATM

Enter your PIN

1 2 3

4 5 6

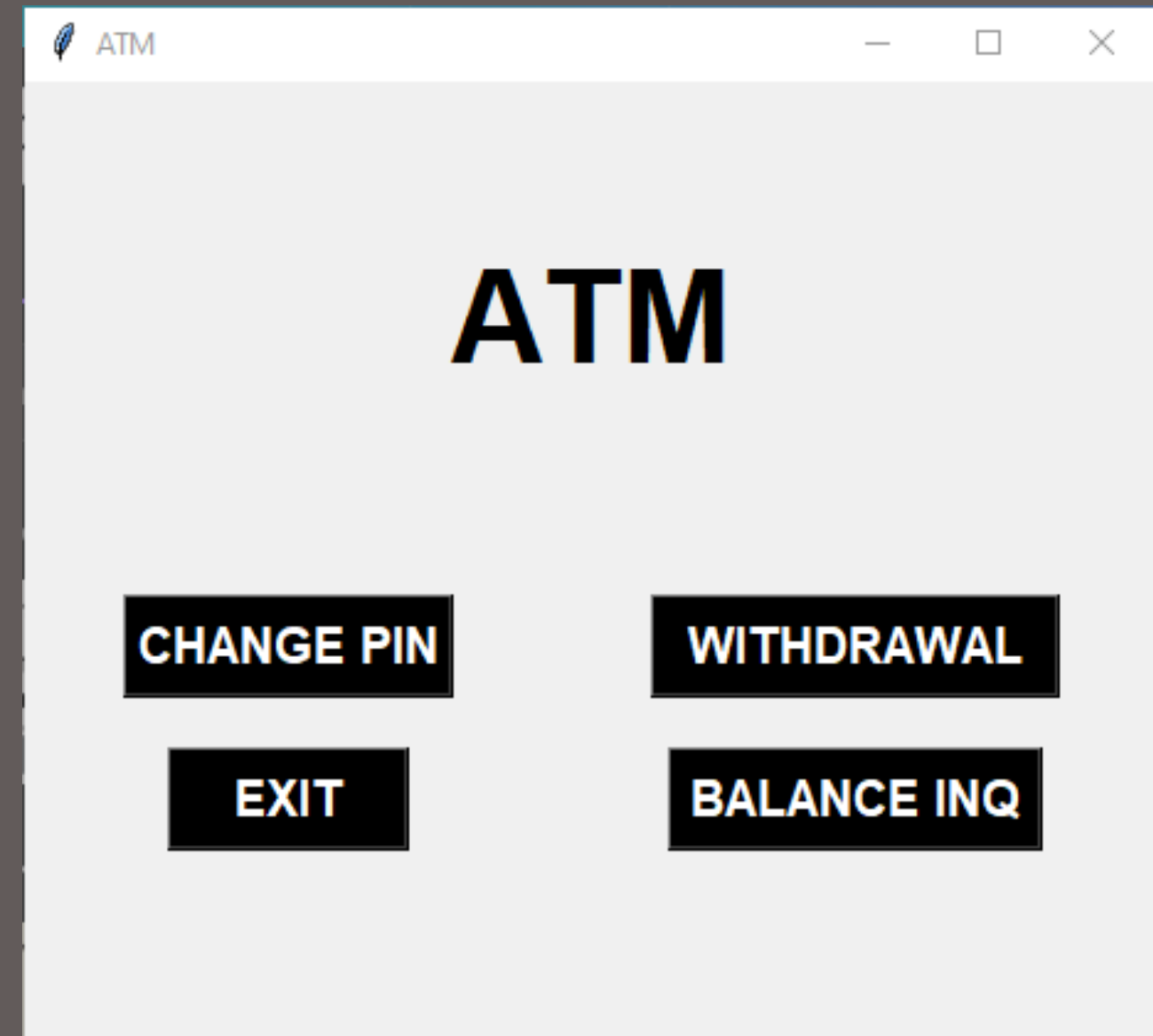
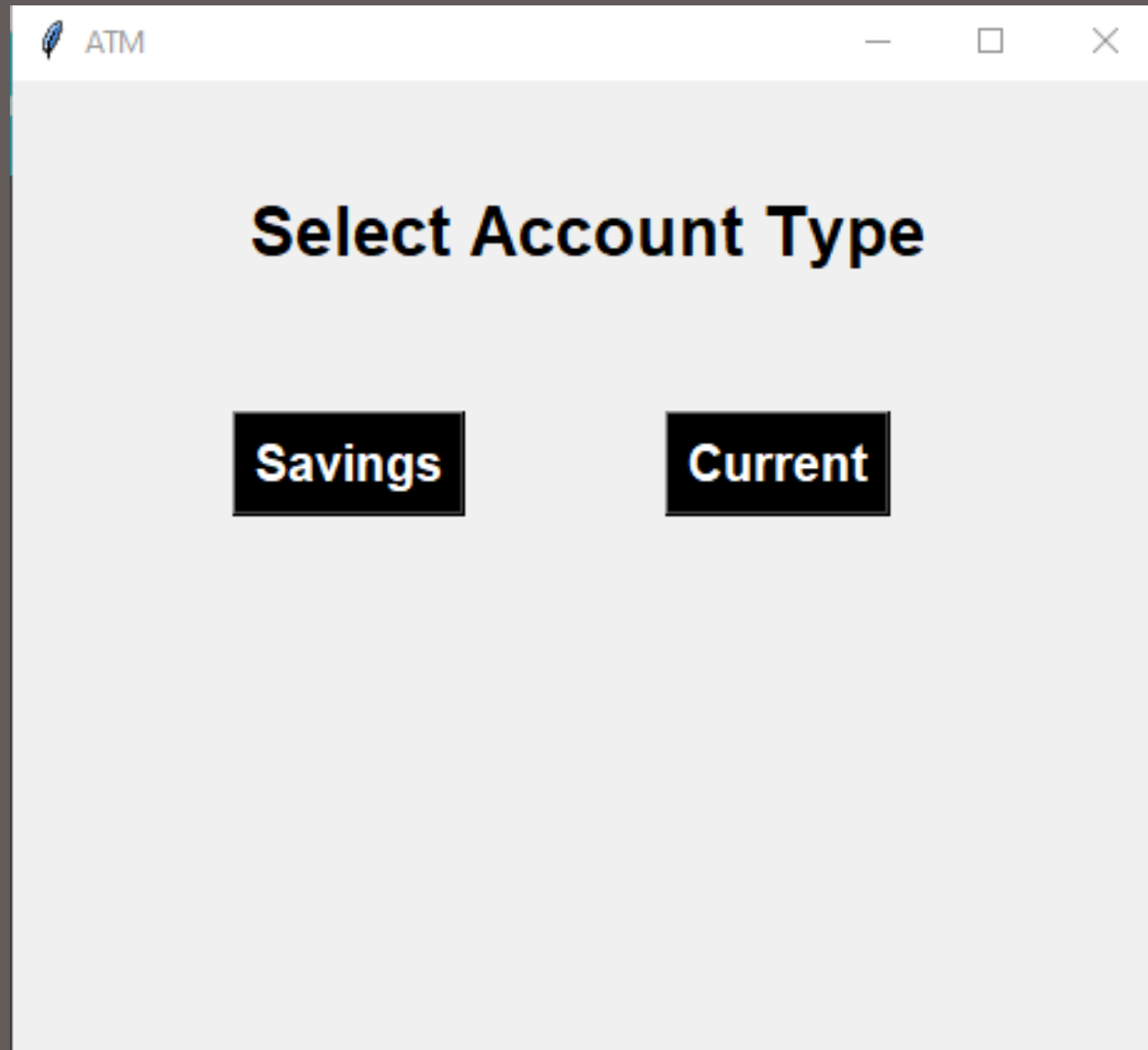
7 8 9

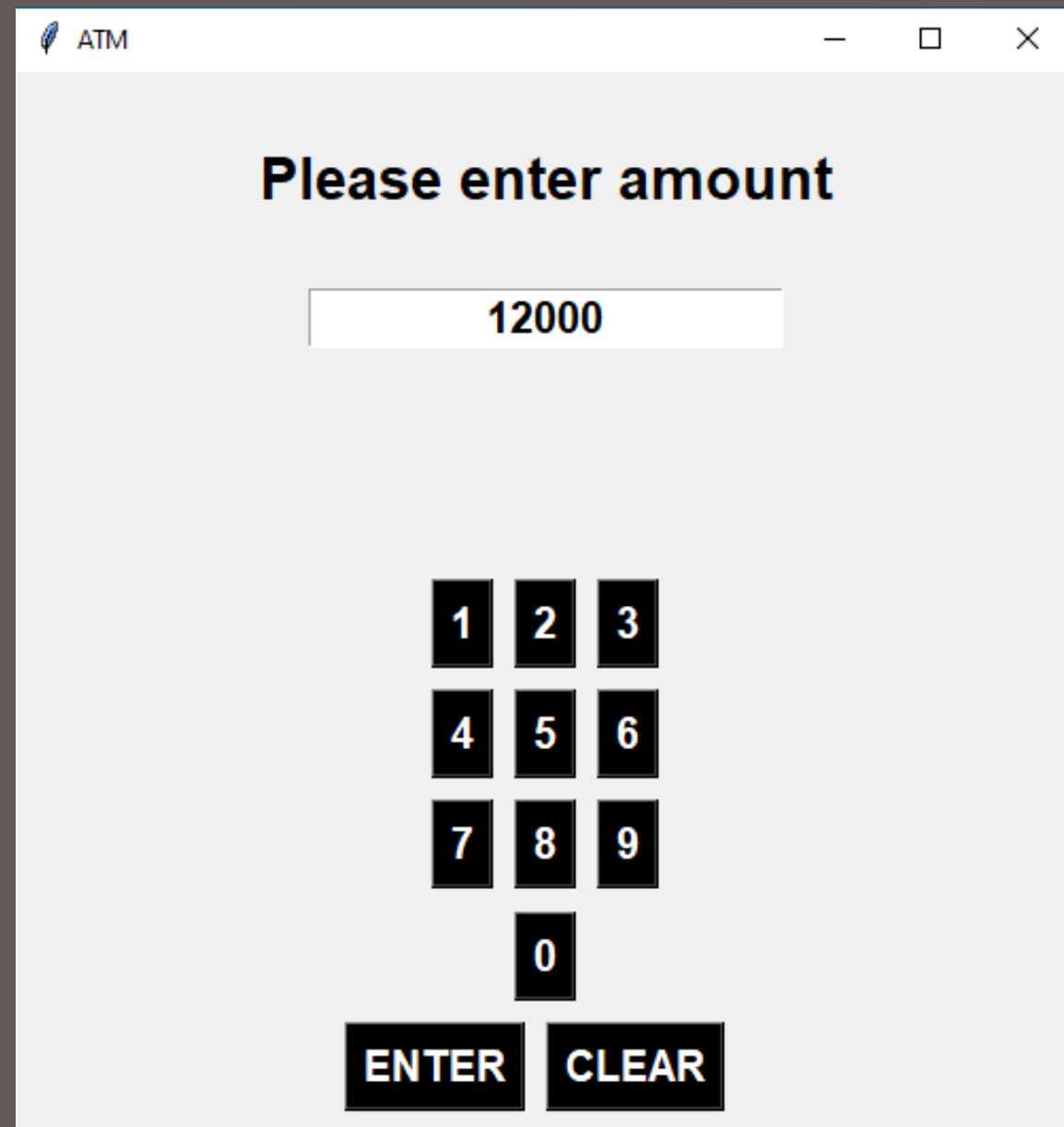
0

ENTER CLEAR EXIT

The image shows a web browser window titled 'ATM'. The main heading is 'Enter your PIN'. Below it is a text input field containing '****'. Below the field is a numeric keypad with buttons for digits 1-9 and 0. At the bottom are three buttons: 'ENTER', 'CLEAR', and 'EXIT'.

Savings account





ATM

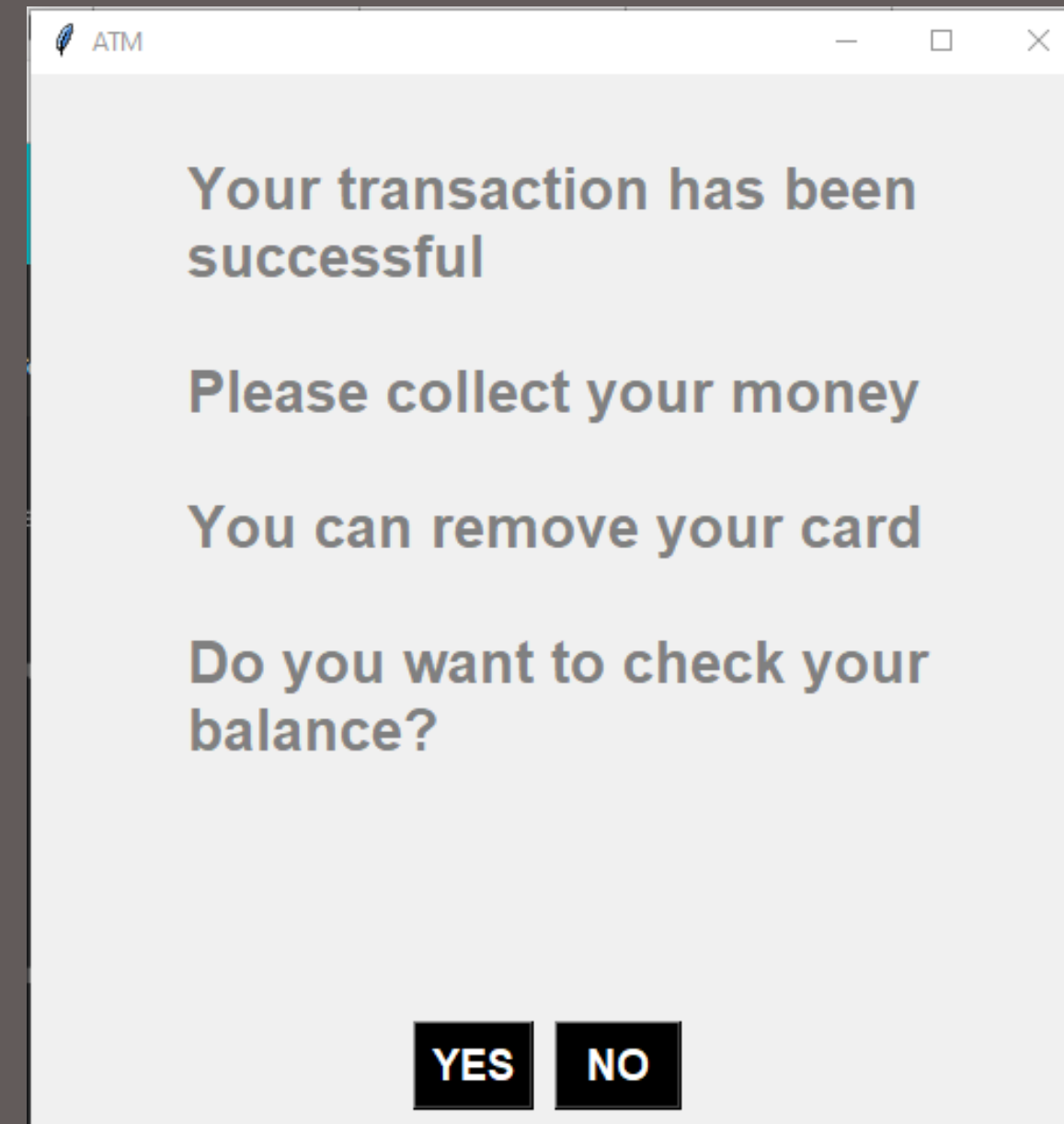
Please enter amount

12000

1 2 3
4 5 6
7 8 9
0

ENTER CLEAR

This is a screenshot of an ATM interface. The window has a title bar with a feather icon and the text 'ATM'. The main content area is light gray. At the top, it says 'Please enter amount'. Below this is a white text input field containing the number '12000'. Under the input field is a numeric keypad with black buttons containing white numbers 1 through 9 and 0. At the bottom of the keypad are two black buttons with white text: 'ENTER' and 'CLEAR'.



ATM

Your transaction has been successful

Please collect your money

You can remove your card

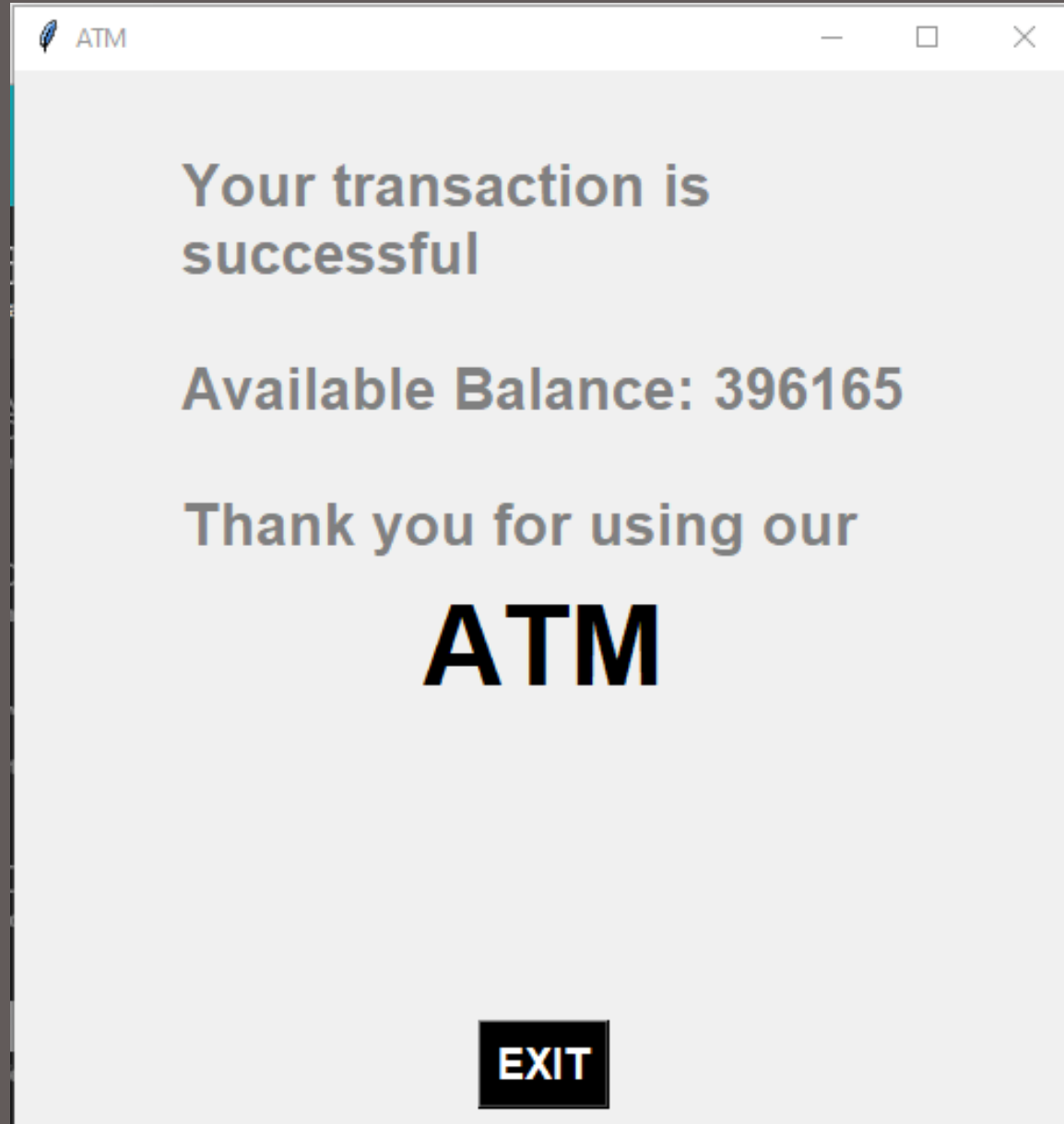
Do you want to check your balance?

YES NO

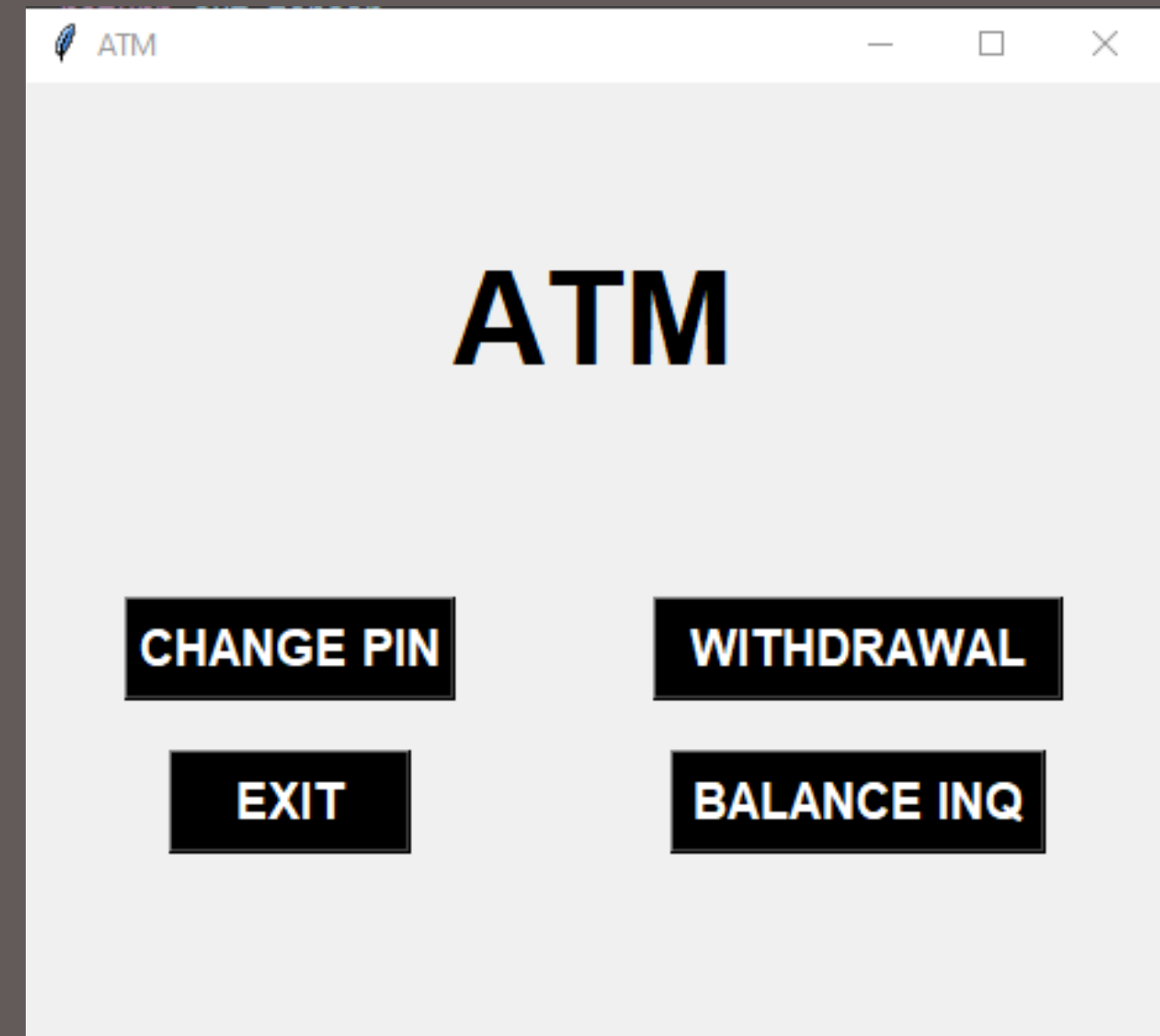
This is a screenshot of an ATM interface. The window has a title bar with a feather icon and the text 'ATM'. The main content area is light gray. It displays the message 'Your transaction has been successful' in bold. Below this are three lines of text: 'Please collect your money', 'You can remove your card', and 'Do you want to check your balance?'. At the bottom right, there are two black buttons with white text: 'YES' and 'NO'.

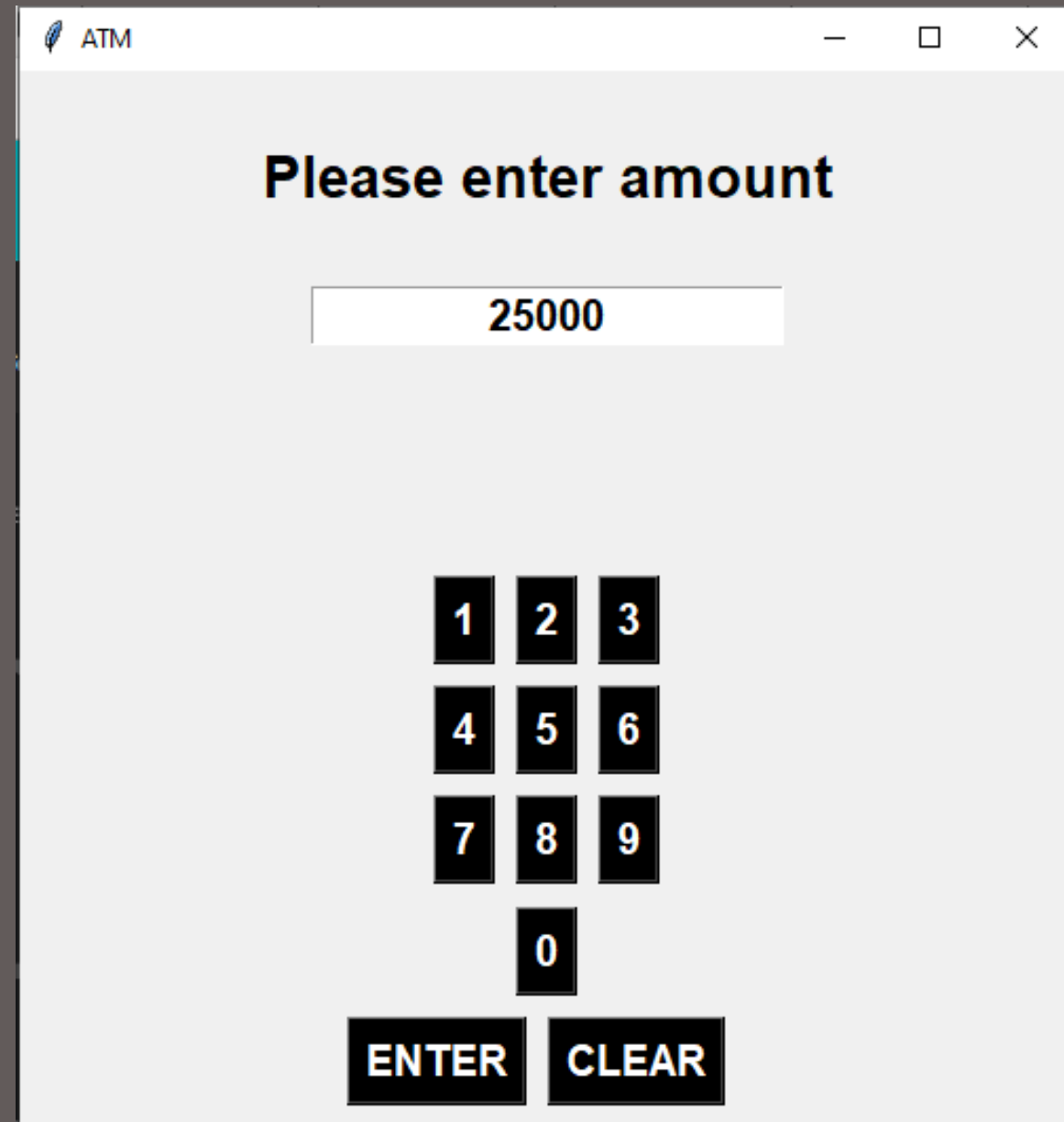
For a savings account the maximum withdrawal limit is 15,000

Savings account balance



Current account





ATM

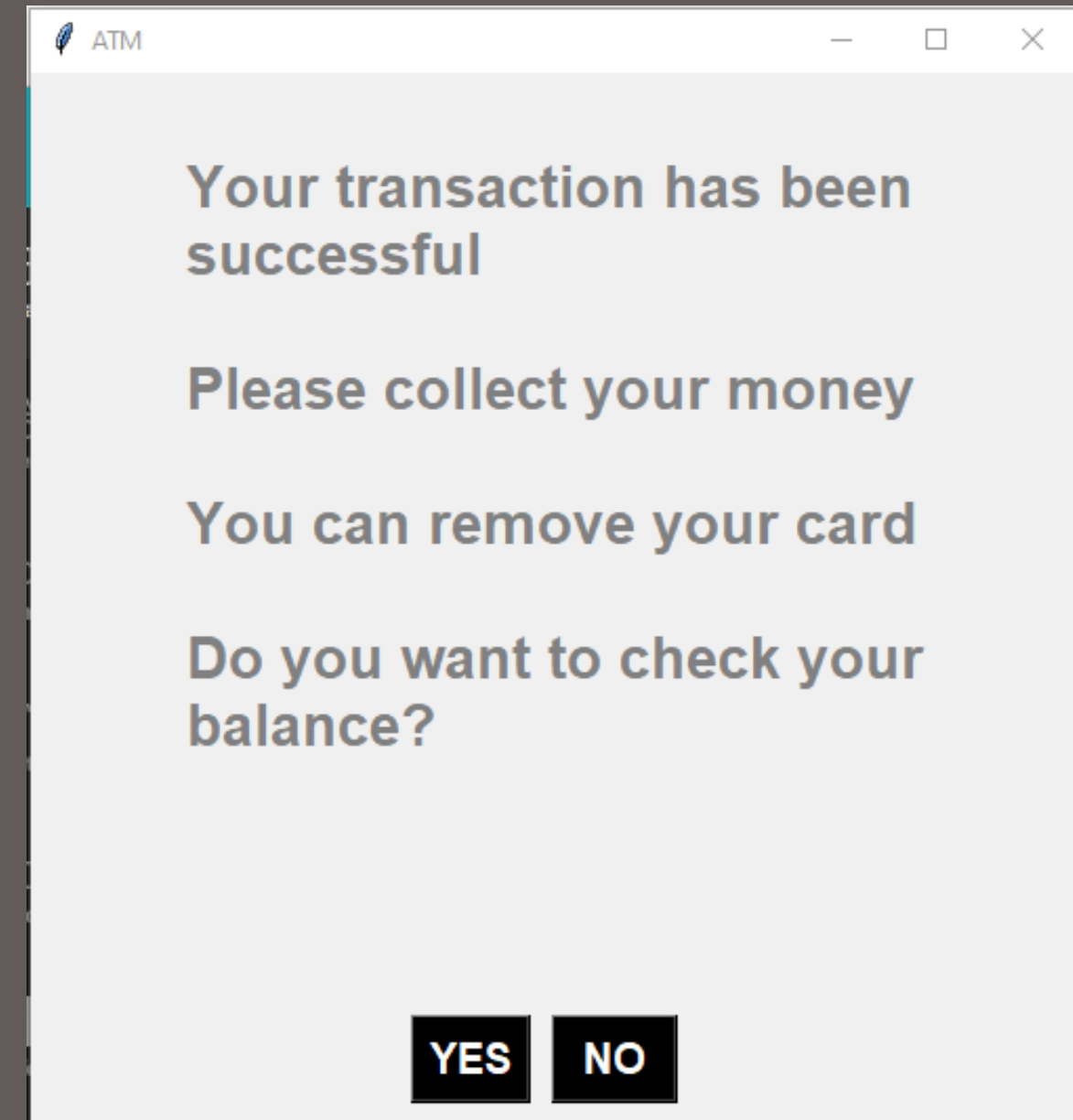
Please enter amount

25000

1 2 3
4 5 6
7 8 9
0

ENTER CLEAR

This image shows a web-based ATM interface. At the top, there's a title bar with a feather icon and the text 'ATM'. Below it, the main content area has a light gray background. The first instruction is 'Please enter amount' in bold black text. Below this is a white input field containing the number '25000'. Under the input field is a numeric keypad with black buttons containing white numbers 1 through 9 and 0. At the bottom of the keypad are two black buttons with white text: 'ENTER' and 'CLEAR'.



ATM

Your transaction has been successful

Please collect your money

You can remove your card

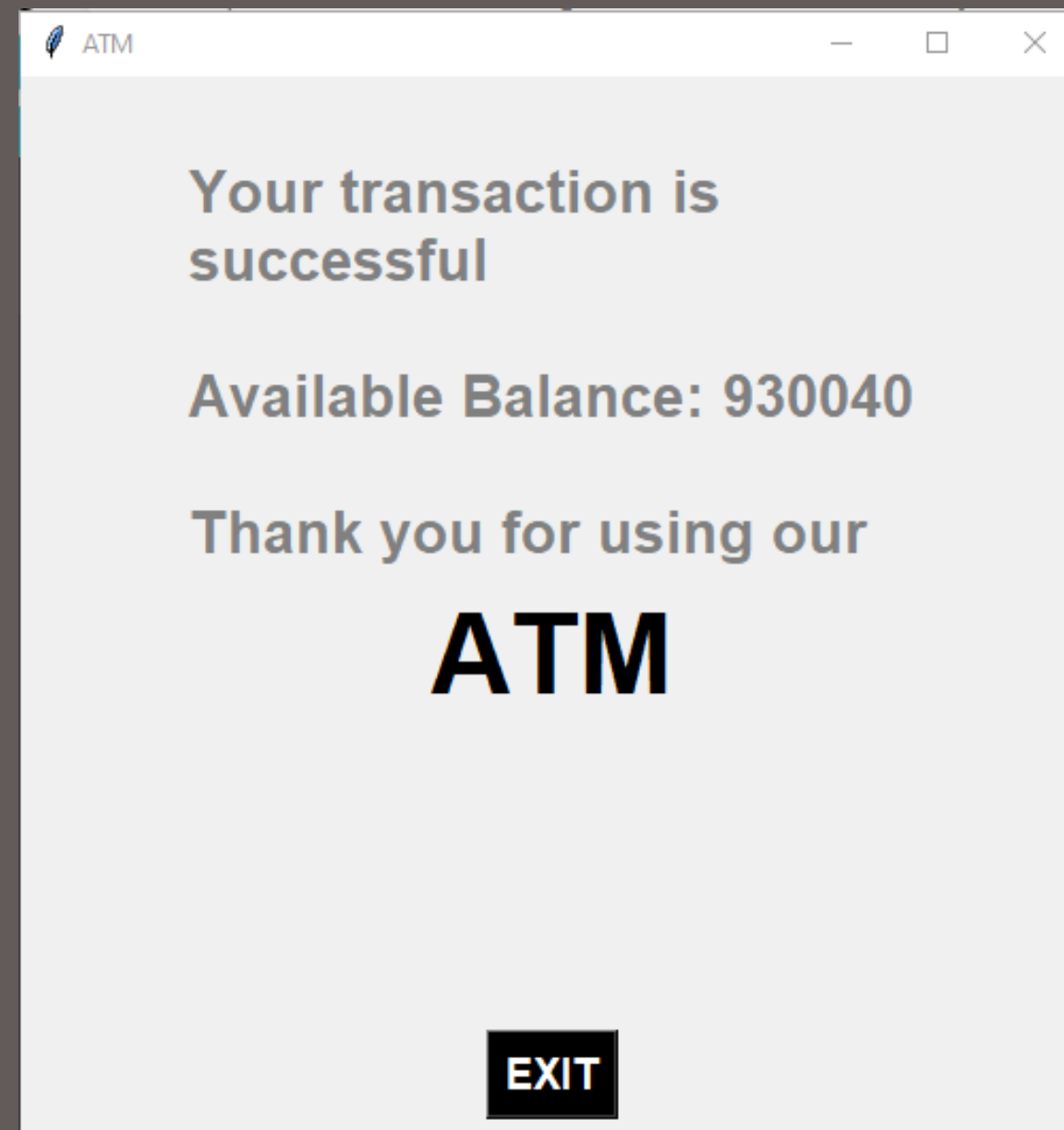
Do you want to check your balance?

YES NO

This image shows the next screen of the ATM interface. It has the same title bar. The main content area has a light gray background. The first message is 'Your transaction has been successful' in bold black text. Below it are two lines of gray text: 'Please collect your money' and 'You can remove your card'. Then, there's a question in bold black text: 'Do you want to check your balance?'. At the bottom, there are two black buttons with white text: 'YES' and 'NO'.

For a current account the maximum withdrawal limit is 30,000

Current account balance



ATM

Your transaction is
successful

Available Balance: 930040

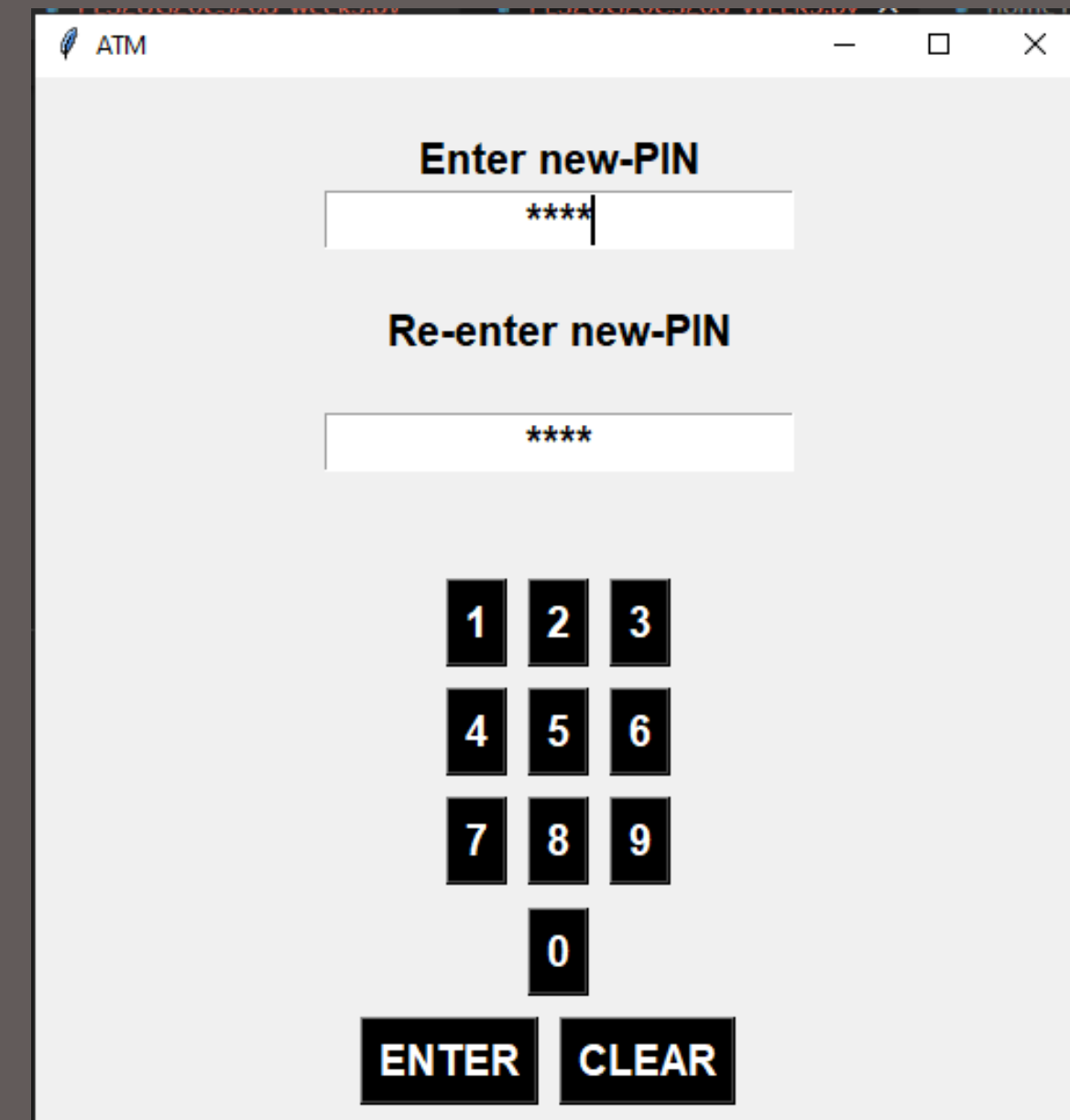
Thank you for using our

ATM

EXIT

This screenshot shows an ATM interface window titled 'ATM'. It displays a confirmation message: 'Your transaction is successful'. Below this, it shows the 'Available Balance: 930040'. A thank you message 'Thank you for using our' is followed by the large text 'ATM'. At the bottom, there is a black button with the white text 'EXIT'.

Change PIN



ATM

Enter new-PIN

Re-enter new-PIN

1 2 3

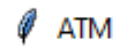
4 5 6

7 8 9

0

ENTER CLEAR

This screenshot shows an ATM interface window titled 'ATM' for changing a PIN. It has two input fields: 'Enter new-PIN' and 'Re-enter new-PIN', both containing four asterisks. Below the fields is a numeric keypad with buttons for digits 1 through 9 and 0. At the bottom, there are two buttons labeled 'ENTER' and 'CLEAR'.



ATM



Your transaction is
successful

Your PIN has been
successfully changed

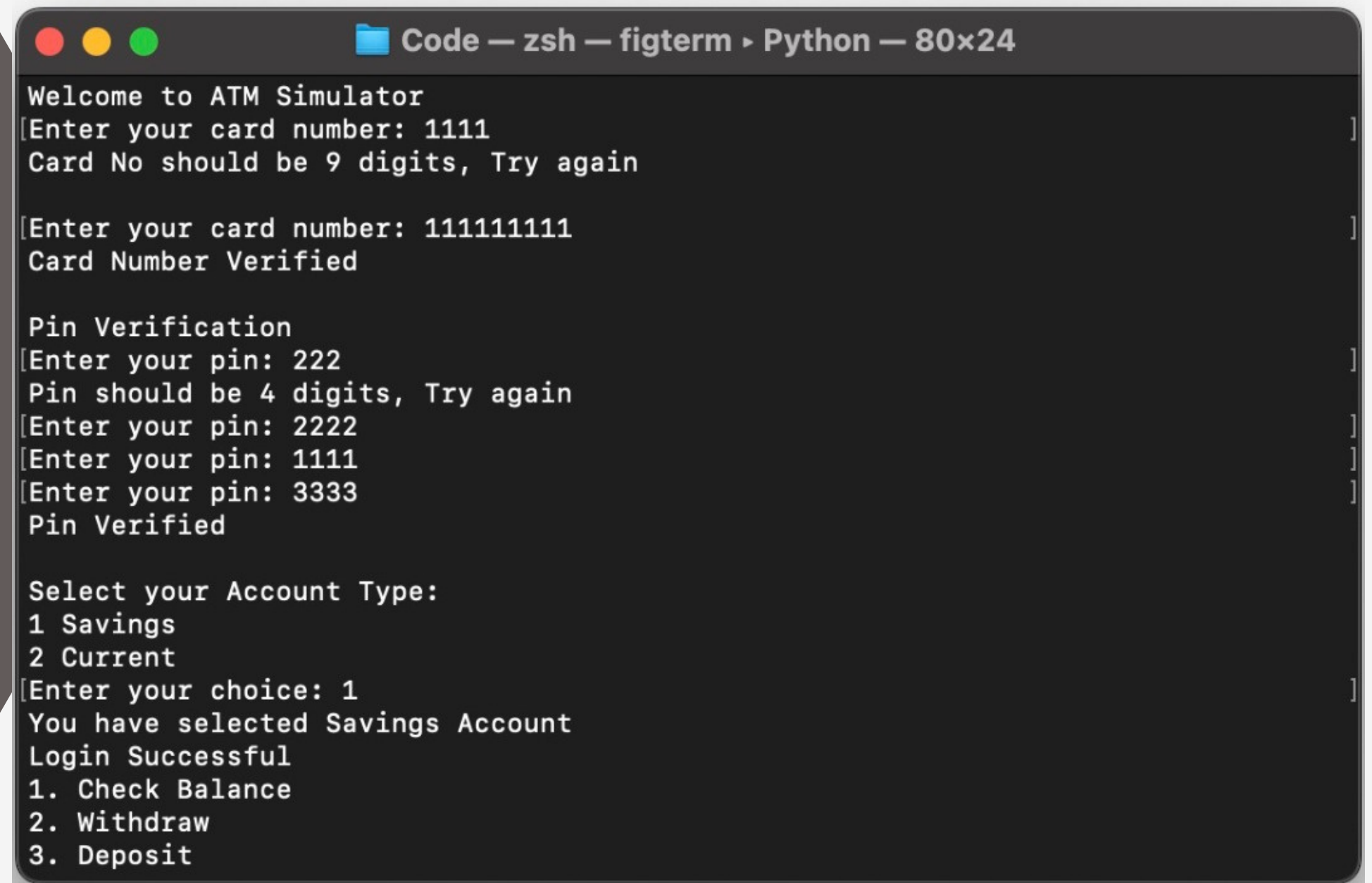
Thank you for using our

ATM

EXIT

TESTING

We have tested and made sure the code only accepts a 9-digit card number and a 4-digit PIN.

A terminal window titled "Code — zsh — figterm › Python — 80x24" with standard macOS window controls (red, yellow, green buttons). The terminal displays the output of an ATM simulator program. It shows two failed attempts at card number entry (4 and 8 digits) and one successful 9-digit entry. For PIN verification, it shows three failed attempts (3, 4, and 3 digits) and one successful 4-digit entry. Finally, it shows the user selecting a Savings Account and logging in successfully, with a menu of options: Check Balance, Withdraw, and Deposit.

```
Welcome to ATM Simulator
[Enter your card number: 1111
Card No should be 9 digits, Try again

[Enter your card number: 111111111
Card Number Verified

Pin Verification
[Enter your pin: 222
Pin should be 4 digits, Try again
[Enter your pin: 2222
[Enter your pin: 1111
[Enter your pin: 3333
Pin Verified

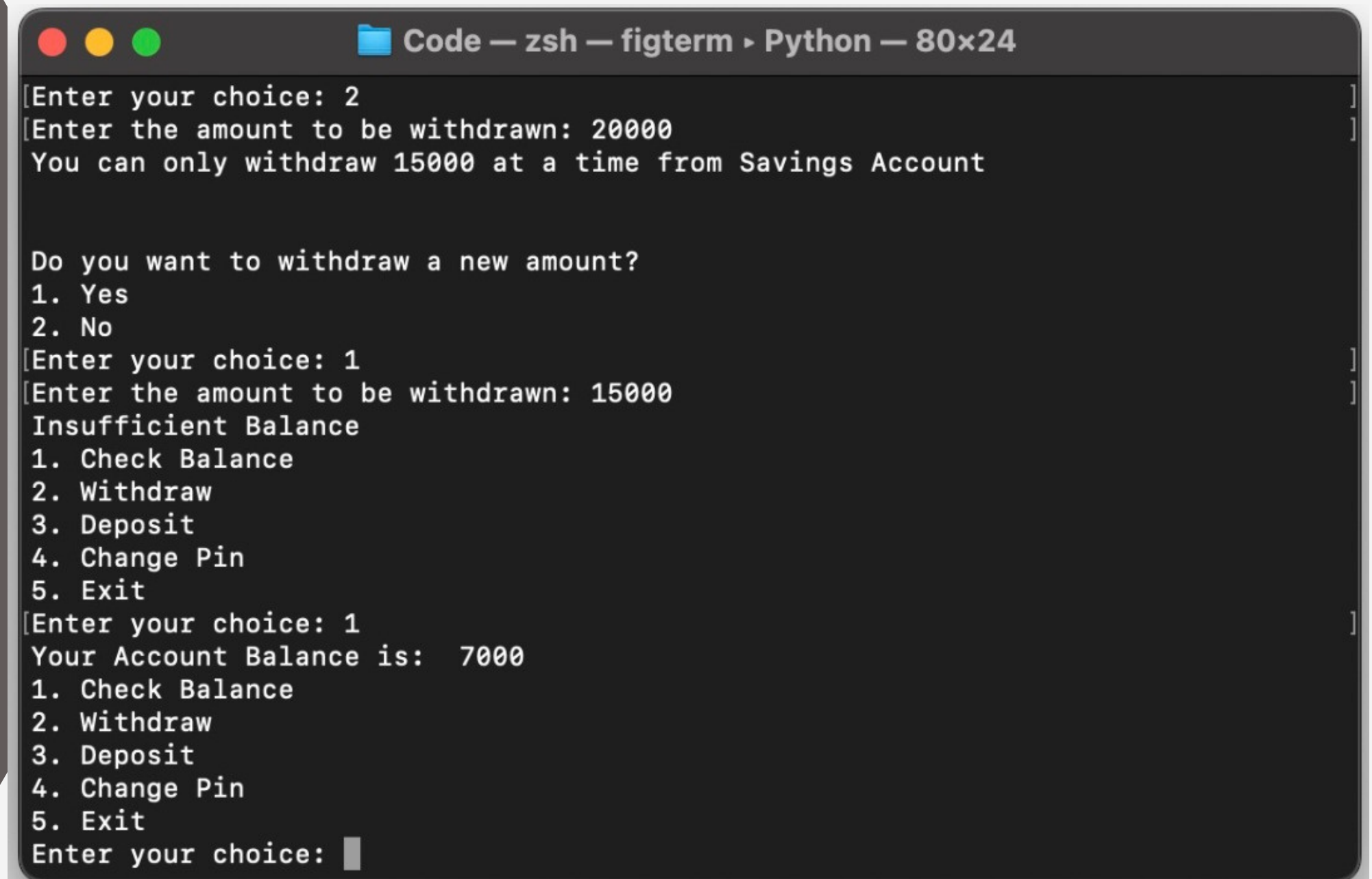
Select your Account Type:
1 Savings
2 Current
[Enter your choice: 1
You have selected Savings Account
Login Successful
1. Check Balance
2. Withdraw
3. Deposit
```

We have tested and made sure a maximum of 15,000 can be withdrawn from a savings account.

```
Code — zsh — figterm › Python — 80x24
[Enter your choice: 2
[Enter the amount to be withdrawn: 20000
You can only withdraw 15000 at a time from Savings Account

Do you want to withdraw a new amount?
1. Yes
2. No
[Enter your choice: 1
[Enter the amount to be withdrawn: 15000
Insufficient Balance
1. Check Balance
2. Withdraw
3. Deposit
4. Change Pin
5. Exit
[Enter your choice: 1
Your Account Balance is: 7000
1. Check Balance
2. Withdraw
3. Deposit
4. Change Pin
5. Exit
Enter your choice: █
```

We have tested to make sure
wrong pins are not accepted.

A terminal window titled "Code — zsh — figterm › Python — 80x24" with standard macOS window controls (red, yellow, green buttons). The terminal displays the following text:

```
[Enter your choice: 2  
[Enter the amount to be withdrawn: 20000  
You can only withdraw 15000 at a time from Savings Account  
  
Do you want to withdraw a new amount?  
1. Yes  
2. No  
[Enter your choice: 1  
[Enter the amount to be withdrawn: 15000  
Insufficient Balance  
1. Check Balance  
2. Withdraw  
3. Deposit  
4. Change Pin  
5. Exit  
[Enter your choice: 1  
Your Account Balance is: 7000  
1. Check Balance  
2. Withdraw  
3. Deposit  
4. Change Pin  
5. Exit  
Enter your choice: █
```

CONCLUSION

This project helped us learn about teamwork, skills and documentation that goes into making software. Git and GitHub helped us manage and organise our code better, making it easier to share among the team as well. Different types of testing and reverse engineering helped uncover bugs in the code that went unnoticed earlier.

THANK YOU