

Objective

Use basic C++ operations, if statements, and loops.

ATM Machine

Write a C++ program that simulates an ATM machine. Assume that you have a bank balance of \$1000 at Bobcats Bank. Write a C++ program that allows you to withdraw money from your account by entering your PIN number and the amount you would like to withdraw. The correct pin number should be declared as a constant. The program should work as follows:

- If the user enters the wrong PIN number, display a message that says, "Wrong PIN, please re-enter your PIN number" and ask them for the PIN again. After three incorrect tries, the program should quit with the message "Wrong PIN, too many tries, your account has been locked". Your program should quit at this point.
- If the user enters the correct PIN, ask the user for the amount of money to withdraw. The user should not be allowed to request more money than their balance amount. Display a message indicating their new balance and quit the program.
- Repeat the above process until the user decides to quit. The user should be asked for the pin every time they want to withdraw.

Display all dollar amounts in fixed format with two decimal places.

Sample run (assuming the balance is \$1000.00 and the PIN is 1234):

```
./a.out
Welcome to Bobcats Bank ATM machine

Enter the PIN number: 1000
Wrong PIN, please re-enter your PIN
You have 2 tries left
Enter the PIN number: 2345
Wrong PIN, please re-enter your PIN
You have 1 tries left
Enter the PIN number: 4567
Too many tries, your account has been locked

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./a.out
Welcome to Bobcats Bank ATM machine

Enter the PIN number: 1234
Enter the amount you wish to withdraw: 5000.00
You do not have enough funds, please try again
Enter the amount you wish to withdraw: 50.00
Your current balance is $950.00

Another transaction(y/n)? y
Enter the PIN number: 1234
Enter the amount you wish to withdraw: 100.00
...
...

Another transaction(y/n)? n
Have a nice day

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```

Grading:

- Submit a link to the GitHub repository assigned to you when you accepted the assignment. No personal repositories will be accepted.
- Programs that contain syntax errors will earn zero points.
- Programs that use global variables other than constants will earn zero points. All variables must be declared inside the `main` function.
- Programs that use any library that was not discussed in class will earn zero points.

Your grade will be determined using the following criteria:

- Correctness (25 points)
 - (15 points) All output results are displayed as requested and have accurate values
 - (4 points) All instructions are followed, and the program flows as requested.
 - (4 points) Error checking and input validation (PIN, balance)
 - (2 points) Clarity and format of the output
 - (2 points) Runs continuously.
- (3 points) Style & Documentation. See programming style below.

Follow the coding style outline on GitHub:

<https://github.com/nasseef/cs/blob/master/docs/coding-style.md>