

ATM Simulator

Submitted by

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PROJECT REPORT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE FIRST SEMESTER



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KEYS

ATM Simulator: Design a program that simulates an ATM machine, where users can withdraw and deposit money, view their balance, and change their PIN.

Variables:

- **pin:** an integer variable that stores the ATM PIN. It is initialized to 1234.
- **balance:** an integer variable that stores the current balance in the user's account. It is initialized to 5000.
- **option:** an integer variable that stores the option selected by the user from the menu.
- **enteredPin:** an integer variable that stores the PIN entered by the user.
- **withdrawAmount:** an integer variable that stores the amount entered by the user for withdrawal.
- **depositAmount:** an integer variable that stores the amount entered by the user for deposit.

Functions: The code does not define any functions.

Files and Datasets: The code does not interact with any external files or datasets.

REPORT

The code is a simple ATM simulator that allows users to perform basic banking transactions such as checking balance, withdrawing money, and depositing money.

The code first initializes the ATM PIN and the current balance in the account. It then prompts the user to enter their PIN. If the entered PIN matches the PIN stored in the pin variable, the user is presented with a menu that contains options to check balance, withdraw money, deposit money, or exit the program.

Based on the user's choice, the code performs the appropriate action. If the user chooses to withdraw money, the code checks if the amount entered is greater than the current balance. If the balance is sufficient, the requested amount is withdrawn from the account and the new balance is displayed. If the balance is insufficient, an error message is displayed.

If the user chooses to deposit money, the amount entered is added to the current balance and the new balance is displayed.

If the user chooses to check the balance, the current balance is displayed.

If the user chooses to exit, the program terminates.

Overall, this code provides a simple and functional ATM simulator that can be used to demonstrate basic programming concepts such as conditional statements and loops. However, it is worth noting that in a real-world scenario, a robust banking system would require additional security measures and error handling to prevent fraudulent activity and ensure user safety.

CODE

```
//ATM PIN IS 1234//
#include <stdio.h>

int main() {
    int pin = 1234;
    int balance = 5000;
    int option, enteredPin, withdrawAmount, depositAmount;

    printf("Welcome to the ATM Simulator!\n");

    while (1) {
        printf("\n Please enter your PIN: ");
        scanf("%d", &enteredPin);

        if (enteredPin != pin) {
            printf("Invalid PIN. Please try again.\n");
            continue;
        }

        printf("\n ATM Menu:\n");
        printf("1. Check Balance\n");
        printf("2. Withdraw\n");
        printf("3. Deposit\n");
        printf("4. Exit\n");
        printf("Enter your option: ");
        scanf("%d", &option);

        switch (option) {
            case 1:
```

```
        printf("Your current balance is: $%d\n", balance);  
        break;  
    case 2:  
        printf("Enter the amount to withdraw: ");  
        scanf("%d", &withdrawAmount);  
        if (withdrawAmount > balance) {  
            printf("Insufficient balance.\n");  
        } else {  
            balance -= withdrawAmount;  
            printf("Withdrawal successful. Remaining balance is: $%d\n", balance);  
        }  
        break;  
    case 3:  
        printf("Enter the amount to deposit: ");  
        scanf("%d", &depositAmount);  
        balance += depositAmount;  
        printf("Deposit successful. Updated balance is: $%d\n", balance);  
        break;  
    case 4:  
        printf("Thank you for using the ATM. Goodbye!\n");  
        return 0;  
    default:  
        printf("Invalid option. Please try again.\n");  
        break;  
    }  
}  
  
return 0;  
}
```