```cpp
#include <iostream>
#include <string>
using namespace std;
double accountBalance = 0.0;
double accountWithdrawal(double x, double y);
double accountDeposit(double x, double y);
void displayBalance(double x);
int main() //This program is a simple ATM
{
        int accountNumber = 0; //Variable for the account number that the user will input
        int transaction = 0;
        double withdrawal = 0.0;
        double deposit = 0.0;
        string name;

        cout << "Welcome, Please enter your name" << endl; //For user to input name
        cin >> name;
        cout << "Please enter your account number\n"; //Asks the user for the account
number
        cin >> accountNumber;
        cout << "Thank you " << name << " Please choose a transaction\n";

        cout << "\t            MENU                    \n"; //Displays a menu for the user to
make transactions
        cout << "\t   [1] Withdraw        \n";
        cout << "\t   [2] Deposit              \n";
        cout << "\t   [3] Balance              \n";
        cout << "\t   [4] Quit            \n";

        cin >> transaction; //Stores the selection from the menu in the variable
transaction

        while (transaction != 4) // the following will repeat until 4 is entered by the
user. 4 will quit the program
        {
                switch (transaction) // Depending on the input transaction the code will
execute the corresponding action
                {
                case 1:
                        cout << "You have chosen Withdrawal\n";
                        cout << "Input how much you would like to withdraw\n";
                        cin >> withdrawal; //Stores the value to withdraw
                        accountBalance = accountWithdrawal(accountBalance, withdrawal);
//The new balance works the arithmetic using the function accountWitdrawal taking those
parameters
                        if (withdrawal < accountBalance) //This if statement avoids the user
from withdrawling more money than it is available

                                cout << "Your new balance is: $" << accountBalance;
                        else
                                cout << "Insufficient funds\n";
                        break;

                case 2:
                        cout << "You have chosen Deposit\n";
                        cout << "Input how much you would like to deposit\n";
                        cin >> deposit;
                        accountBalance = accountDeposit(accountBalance, deposit);
```

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                    cout << "Your new balances is: $" << accountBalance << endl;
                    break;

            case 3:
                    cout << "You have chosen Balance\n"; //Displays current balance
                    displayBalance(accountBalance);
                    break;

            default:
                    cout << "Invalid\n"; // Allows inputs from 1-4
                    break;
            }
            cout << "\nPlease choose a transaction" << endl; //When the user finishes
with one transaction it will repeat until the user decides to quit
            cin >> transaction;
        }
}
double accountWithdrawal(double x, double y) //Function that takes two arguments
{
        double wdrawAmount = x - y;
        return wdrawAmount;
}
double accountDeposit(double x, double y)
{
        double depAmount = x + y;
        return depAmount;
}
void displayBalance(double x)
{
        cout << "Your balance is: $" << x << endl;
}
```