

C ++ Programming Assessment Test

1. Create a Project to demonstrate an ATM Banking Application which will help to get to know the bank information

Code:

```
#include <iostream>
#include <ctime>
using namespace std;

class ATM {
private:
    string currentDateTime() {
        time_t now = time(0);
        tm* ltm = localtime(&now);
        string dateTime = asctime(ltm);
        //dateTime.pop_back(); // Remove the newline character
        return dateTime;
    }

    int atmPin;
    int attempts;
    double startingBalance;
    double currentBalance;

public:
    ATM() {
        atmPin = 12345;
        attempts = 1;
        startingBalance = 60000.0;
        currentBalance = 20000.0;
    }

    void displayWelcomeScreen() {
```

```

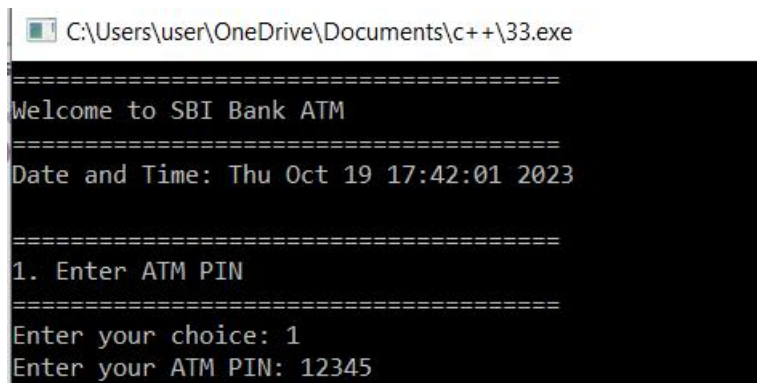
cout << "===== " << endl;
cout << "      Welcome to SBI Bank ATM" << endl;
cout << "===== " << endl;

cout << "Date and Time: " << currentDateTime() << endl;

cout << "===== " << endl;
cout << "1. Enter ATM PIN" << endl;
cout << "===== " << endl;
cout << "2. Help" << endl;
}

```

Output:



```

C:\Users\user\OneDrive\Documents\c++\33.exe
=====
Welcome to SBI Bank ATM
=====
Date and Time: Thu Oct 19 17:42:01 2023
=====
1. Enter ATM PIN
=====
Enter your choice: 1
Enter your ATM PIN: 12345

```

```

class Bank {

    // Private variables used inside class
private:
    string name;
    long long accnumber;
    char type[10];
    long long amount = 0;
    long long tot = 0;

    // Public variables
public:
    // Function to set the person's data
    void setvalue()

```

```

{
    cout << "Enter name\n";
    cin.ignore();

    // To use space in string
    getline(cin, name);

    cout << "Enter Account number\n";
    cin >> accnumber;
    cout << "Enter Account type\n";
    cin >> type;
    cout << "Enter Balance\n";
    cin >> tot;
}

// Function to display the required data
void showdata()
{
    cout << "Name:" << name << endl;
    cout << "Account No:" << accnumber << endl;
    cout << "Account type:" << type << endl;
    cout << "Balance:" << tot << endl;
}

// Function to deposit the amount in ATM
void deposit()
{
    cout << "\nEnter amount to be Deposited\n";
    cin >> amount;
}

// Function to show the balance amount
void showbal()
{
    tot = tot + amount;
    cout << "\nTotal balance is: " << tot;
}

// Function to withdraw the amount in ATM
void withdrawl()
{
    int a, avai_balance;

```

```

        cout << "Enter amount to withdraw\n";
        cin >> a;
        avai_balance = tot - a;
        cout << "Available Balance is" << avai_balance;
    }
};

```

// Driver Code

```
int main()
```

```

{
    // Object of class
    Bank b;

    int choice;

    // Infinite while loop to choose
    // options everytime
    while (1) {
        cout << "\n~~~~~"
            << "~~~~~"
            << "~~~WELCOME~~~~~"
            << "~~~~~"
            << "~~~~~\n\n";
        cout << "Enter Your Choice\n";
        cout << "\t1. Enter name, Account "
            << "number, Account type\n";
        cout << "\t2. Balance Enquiry\n";
        cout << "\t3. Deposit Money\n";
        cout << "\t4. Show Total balance\n";
        cout << "\t5. Withdraw Money\n";
        cout << "\t6. Cancel\n";
        cin >> choice;

        // Choices to select from
        switch (choice) {
            case 1:
                b.setvalue();
                break;
            case 2:
                b.showdata();
                break;
            case 3:
                b.deposit();
                break;
            case 4:
                b.showbal();
                break;
            case 5:
                b.withdrawl();
                break;

```

```

        case 6:
            exit(1);
            break;
        default:
            cout << "\nInvalid choice\n";
    }
}
}

```

Output:

```

~~~~~WELCOME~~~~~

Enter Your Choice
1. Enter name, Account number, Account type
2. Balance Enquiry
3. Deposit Money
4. Show Total balance
5. Withdraw Money
6. Cancel

2
Name:rakesh
Account No:15678
Account type:saving
Balance:2000

3

Enter amount to be Deposited
20000

4

Total balance is: 22000

5
Enter amount to withdraw
300
Available Balance is21700

```