# LAB-8

```
#include <iostream>
using namespace std;
class myClass {
    private :
        int num;
        int bal;
        string password;
        int bal_initial;
        string password_initial;
        string pass;
    public :
        struct Node_b {
            string data;
```

```
        Node_b *key;
    } *New_b, *head_b, *tail_b,
*temp_b;
    struct Node_a {
        int data;
        Node_a *key;
    } *New_a, *head_a, *tail_a,
*temp_a;
myClass()
    {
        cout << "=====Welcometo my
Bank atm=====" << endl;
        cout << "Input Balance : ";
        cin >> bal;
        bal_initial = bal;
```

```
    cout << "Set Password : ";
    cin >> password;
    password_initial = password;
    New_a = NULL;
    head_a = NULL;
    tail_a = NULL;
    New_b = NULL;
    head_b = NULL;
    tail_b = NULL;
}
string get_pass();
int get_data();
void withdraw();
void chang_pas();
```

```
        void withdraw_his();
        void chang_paswrd_his();

};

string myClass :: get_pass()
{
    cout << "Enter a New Password : ";
    cin >> pass;
    return pass;
}
int myClass::get_data()
{
```

```
    cout << "Enter the Amount to
Withdraw : ";
    cin >> num;
    return num;
}
void myClass :: withdraw()
{
    int n = get_data();

    if(n > bal)
    {
        cout << "Insufficient Balance" <<
endl;
    }
    else
```

```
{
    New_a = new Node_a;
    New_a->data = n;
    New_a->key = NULL;

    if(head_a == NULL)
    {
        head_a = New_a;
        tail_a = New_a;
    }
    else
    {
        tail_a->key = New_a;
        tail_a = New_a;
```

```
        }
        bal = bal - n;
        cout << "Amount Withdrawn
Successfully" << endl;
    }
}
void myClass :: chang_pas()
{
    string check;
    cout << "Enter Your Old PassWord : ";
    cin >> check;
    if(check != password)
    {
        cout << "Incorrect Password, Please
Try Again" << endl;
```

```
}
else
{
    string x = get_pass();
    New_b = new Node_b;
    New_b->data = x;
    New_b->key = NULL;

    if(head_b == NULL)
    {
        head_b = New_b;
        tail_b = New_b;
    }
    else
```

```
        {
            tail_b->key = New_b;
          tail_b = New_b;
        }
        password = x;
        cout << "Password Changed
Successfully" << endl;
    }
}
void myClass :: withdraw_his()
{
    cout << "WITHDRAW HISTORY : ";
    temp_a = head_a;
    cout << bal_initial;
```

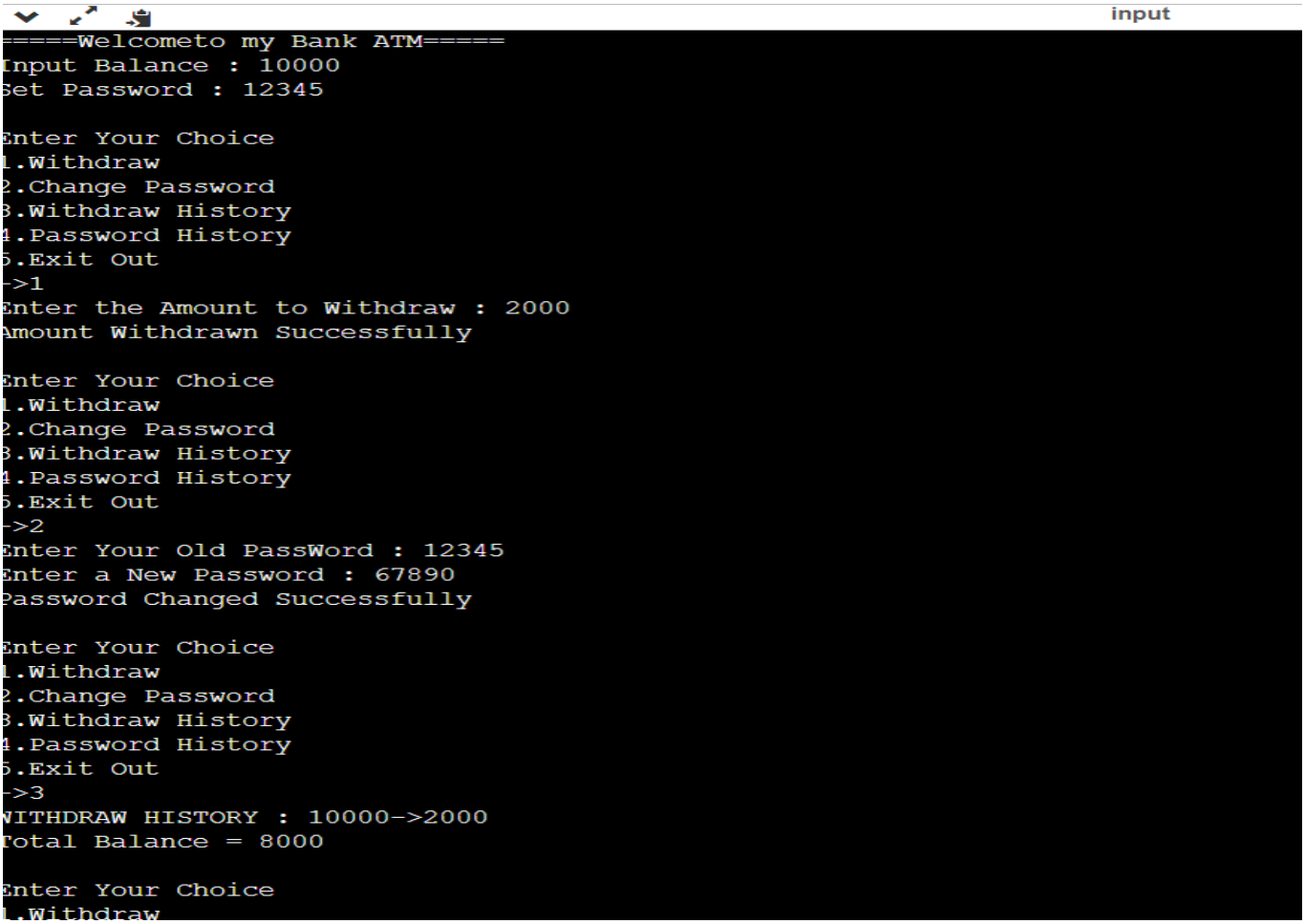
```
    while(temp_a != NULL)
    {
        cout << "->" << temp_a->data;
        temp_a = temp_a->key;
    }
    cout << "\nTotal Balance = " << bal <<
endl;
}
void myClass::chang_paswrd_his()
{
    cout << "PASSWORD HISTORY : ";
    temp_b = head_b;
    cout << password_initial;
    while(temp_b != NULL)
```

```
    {
        cout << "->" << temp_b->data;
        temp_b = temp_b->key;
    }
    cout << "\nNew Password = " <<
password << endl;
}

int main()
{
    myClass atm;
    int ch = 1, op;
    while(ch != 0)
    {
```

```
        cout << "\nEnter Your Choice" <<
endl;
        cout << "1.Withdraw" << endl;
        cout << "2.Change Password" <<
endl;
        cout << "3.Withdraw History" <<
endl;
        cout << "4.Password History" <<
endl;
        cout << "5.Exit Out" << endl;
        cout << "->";
        cin >> op;

        switch(op)
        {
```

```
case 1 :
    atm.withdraw();
    break;
case 2 :
    atm.chang_pas();
    break;
case 3 :
    atm.withdraw_his();
    break;
case 4 :
    atm.chang_paswrd_his();
    break;
case 5 :
    return 0;
```

```
            default :
                cout << "Invalid Choice" <<
endl;
        }
    }
}
```




input
5.Exit Out
->2
Enter Your Old PassWord : 12345
Enter a New Password : 67890
Password Changed Successfully
Enter Your Choice
1.Withdraw
2.Change Password
3.Withdraw History
4.Password History
5.Exit Out
->3
WITHDRAW HISTORY : 10000->2000
Total Balance = 8000
Enter Your Choice
1.Withdraw
2.Change Password
3.Withdraw History
4.Password History
5.Exit Out
->4
PASSWORD HISTORY : 12345->67890
New Password = 67890
Enter Your Choice
1.Withdraw
2.Change Password
3.Withdraw History
4.Password History
5.Exit Out
->5
...Program finished with exit code 0
Press ENTER to exit console.