

Test 02 CPP

```
#include <bits/stdc++.h>
using namespace std;
class BankAccount
{
private:
    string name;
    int accNo;
    string accType;
    double balance;

public:
    BankAccount()
    {
        name = "No Name";
        accNo = 0;
        accType = "None";
        balance = 0;
    }
    BankAccount(string name, int accNo, string accType, double balance)
    {
        this->name = name;
        this->accNo = accNo;
        this->accType = accType;
        this->balance = balance;
    }
    // Setter
    void setName(string name) { this->name = name; }
    void setAccNo(int accNo) { this->accNo = accNo; }
    // void setBalance(double balance) { this->balance = balance; }
    void setAccType(string accType) { this->accType = accType; }

    // getters
    string getName() { return this->name; }
    string getAccType() { return this->accType; }
    double getBalance() { return this->balance; }
    int getAccNo() { return this->accNo; }

    virtual void wihdrow(double money)
    {
        this->balance -= money;
    }
    virtual void deposit(double money)
    {
        this->balance += money;
    }

    void display()
    {
        cout << "Acc no : " << this->accNo << endl;
        cout << "Acc Holder Name : " << this->name << endl;
    }
}
```

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        cout << "Type of Account: " << this->accType << endl;
        cout << "Balance : " << this->balance << endl;
    }
};
//

int main()
{
    BankAccount bankAccount;
    int ch = 0;
    do
    {
        double money = 0;
        cout << "\nEnter Your Choice :: " << endl
              << "1) Create Account \t 2) Display account details \t 3) Deposit Money " <<
endl
              << "4) Withdraw money \t 5) Display name and balance " << endl
              << "\t:";
        cin >> ch;
        switch (ch)
        {
            case 1:
            {
                string name, accType;
                int accNo;

                cout << "\nEnter Name of Acc Holder : ";
                cin >> name;
                cout << "\nEnter Type of Acc : ";
                cin >> accType;
                cout << "\nEnter Acc No : ";
                cin >> accNo;
                cout << "\nEnter Initial Deposite : ";
                cin >> money;
                bankAccount.setName(name);
                bankAccount.setAccType(accType);
                bankAccount.setAccNo(accNo);
                bankAccount.deposit(money);
            }
            break;
            case 2:
            {
                bankAccount.display();
            }
            break;
            case 3:
            {
                cout << "\nEnter Amount you want to deosite : ";
                cin >> money;
                bankAccount.deposit(money);
            }
            break;
        }
    }
}

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        break;
    case 4:
    {
        cout << "\nEnter Amount you want to Withdrow : ";
        cin >> money;
        if (bankAccount.getBalance() < money)
        {
            cout << "\nLow Balance....!" << " \nBalance : " <<
bankAccount.getBalance();
        }
        else
        {
            cout << "\nWithdrawal Success...!";
            bankAccount.wihdraw(money);
            cout << "\nDebited amt : " << money;
            cout << "\nBalance : " << bankAccount.getBalance();
        }
    }
    break;
    case 5:
    {
        cout << "\nName of Account Holder : " << bankAccount.getName();
        cout << "\nAccount Number : " << bankAccount.getAccNo();
        cout << "\nAccount Balance : " << bankAccount.getBalance();
    }
    break;
    default:
        cout << "\n\nInvalid Choice..";
        break;
    }

} while (ch != 0);

// cout << "Hi!";
}

```

Output: PS D:\Fullstack-Java-FirstBit-Solutions> & 'c:\Users\bhagv\.vscode\extensions\ms-vscode.cpptools-1.21.6-win32-x64\debugAdapters\bin\WindowsDebugLauncher.exe' '--stdin=Microsoft-MIEngine-In-403waxhp.1ph' '--stdout=Microsoft-MIEngine-Out-vbcjyvkt.tpm' '--stderr=Microsoft-MIEngine-Error-ijj1taes.4kp' '--pid=Microsoft-MIEngine-Pid-c3arprhp.ee3' '--dbgExe=C:\TDM-GCC-64\bin\gdb.exe' '--interpreter=mi'

Enter Your Choice ::

- 1) Create Account 2) Diaplay account details 3) Deposit Money
- 4) Withdrow money 5) Display name and balance

:1

Enter Name of Acc Holder : Bhagvat

Enter Type of Acc : Savings

Enter Acc No : 1232

Enter Initial Deposite : 78827

Enter Your Choice ::

1) Create Account 2) Diaplay account details 3) Deposit Money

4) Withdraw money 5) Display name and balance

:3

Enter Amount you want to deosite : 23

Enter Your Choice ::

1) Create Account 2) Diaplay account details 3) Deposit Money

4) Withdraw money 5) Display name and balance

:2

Acc no : 1232

Acc Holder Name : Bhagvat

Type of Account: Savings

Balance : 78850

Enter Your Choice ::

1) Create Account 2) Diaplay account details 3) Deposit Money

4) Withdraw money 5) Display name and balance

:3

Enter Amount you want to deosite : 3241

Enter Your Choice ::

1) Create Account 2) Diaplay account details 3) Deposit Money

4) Withdraw money 5) Display name and balance

:2

Acc no : 1232

Acc Holder Name : Bhagvat

Type of Account: Savings

Balance : 82091

Enter Your Choice ::

- 1) Create Account 2) Diaplay account details 3) Deposit Money
4) Withdraw money 5) Display name and balance

:4

Enter Amount you want to Withdrow : 200001

Low Balance....!

Balance : 82091

Enter Your Choice ::

- 1) Create Account 2) Diaplay account details 3) Deposit Money
4) Withdraw money 5) Display name and balance

:4

Enter Amount you want to Withdrow : 200

Withdrowal Success...!

Debited amt :200

Balance : 81891

Enter Your Choice ::

- 1) Create Account 2) Diaplay account details 3) Deposit Money
4) Withdraw money 5) Display name and balance

:5

Name of Account Holder : Bhagvat

Account Number : 1232

Account Balance : 81891

Enter Your Choice ::

- 1) Create Account 2) Diaplay account details 3) Deposit Money

4) Withdraw money 5) Display name and balance

:0

Invalid Choice..

PS D:\Fullstack-Java-FirstBit-Solutions>

The screenshot shows the Visual Studio Code editor with a C++ file named `test02.cpp` open. The code defines a `BankAccount` class with methods for getting account type, balance, and number, and for withdrawing and depositing money. The `main` function in `test02.exe` prompts the user to enter their choice (1-5) and then the amount to withdraw. The terminal output shows the program running, with the user entering choice 4 and amount 200, resulting in a successful withdrawal and an updated balance of 81891.

```
class BankAccount
{
public:
    string getAccType() { return this->accType; }
    double getBalance() { return this->balance; }
    int getAccNo() { return this->accNo; }

    virtual void withdraw(double money)
    {
        this->balance -= money;
    }
    virtual void deposit(double money)
    {
        this->balance += money;
    }
};

void display()
{
    cout << "Low Balance....!" << endl;
    cout << "Balance : " << balance << endl;
    cout << "Enter Your Choice ::" << endl;
    cout << "1) Create Account      2) Display account details      3) Deposit Money" << endl;
    cout << "4) Withdraw money      5) Display name and balance" << endl;
    int choice;
    choice = getche();
    cout << endl;

    if (choice == 1)
    {
        cout << "Enter Amount you want to Withdraw : " << endl;
        double amount;
        amount = getche();
        cout << endl;

        withdraw(amount);
        cout << "Withdrawal Success....!" << endl;
        cout << "Debited amt : " << amount << endl;
        cout << "Balance : " << balance << endl;
        cout << "Enter Your Choice ::" << endl;
        cout << "1) Create Account      2) Display account details      3) Deposit Money" << endl;
        cout << "4) Withdraw money      5) Display name and balance" << endl;
        int choice2;
        choice2 = getche();
        cout << endl;

        if (choice2 == 1)
        {
            cout << "Name of Account Holder : Bhagvat" << endl;
            cout << "Account Number : 1232" << endl;
            cout << "Account Balance : 81891" << endl;
            cout << "Enter Your Choice ::" << endl;
            cout << "1) Create Account      2) Display account details      3) Deposit Money" << endl;
            cout << "4) Withdraw money      5) Display name and balance" << endl;
            int choice3;
            choice3 = getche();
            cout << endl;
        }
    }
}
```

Low Balance....!
Balance : 82091
Enter Your Choice ::
1) Create Account 2) Display account details 3) Deposit Money
4) Withdraw money 5) Display name and balance
:4
Enter Amount you want to Withdraw : 200
Withdrawal Success....!
Debited amt :200
Balance : 81891
Enter Your Choice ::
1) Create Account 2) Display account details 3) Deposit Money
4) Withdraw money 5) Display name and balance
:5
Name of Account Holder : Bhagvat
Account Number : 1232
Account Balance : 81891
Enter Your Choice ::
1) Create Account 2) Display account details 3) Deposit Money
4) Withdraw money 5) Display name and balance
:1