

Adapter Pattern Example

// Abstract Target

```
class AbstractPlug {
public:
    void virtual RoundPin(){}
    void virtual PinCount(){}
};
```

// Concrete Target

```
class Plug : public AbstractPlug {
public:
    void RoundPin() {
        cout << " I am Round Pin" << endl;
    }
    void PinCount() {
        cout << " I have two pins" << endl;
    }
};
```

// Abstract Adaptee

```
class AbstractSwitchBoard {
public:
    void virtual FlatPin() {}
    void virtual PinCount() {}
};
```

// Concrete Adaptee

```
class SwitchBoard : public AbstractSwitchBoard {
public:
    void FlatPin() {
        cout << " Flat Pin" << endl;
    }
    void PinCount() {
        cout << " I have three pins" << endl;
    }
};
```

```
// Adapter
class Adapter : public AbstractPlug {
public:
    AbstractSwitchBoard *T;
    Adapter(AbstractSwitchBoard *TT) {
        T = TT;
    }
    void RoundPin() {
        T->FlatPin();
    }
    void PinCount() {
        T->PinCount();
    }
};
```

```
// Client code
void _tmain(int argc, _TCHAR* argv[])
{
    SwitchBoard *mySwitchBoard = new SwitchBoard;//Adaptee
```

```
// Target = Adapter(Adaptee)
    AbstractPlug *adapter = new Adapter(mySwitchBoard);
    adapter->RoundPin();
    adapter->PinCount();
}
```