Ödev1 g1

→ g1= AndGate(“G1”, 0, 1)

```
class AndGate(BinaryGate):
    def__init__(self, n, pA=None, pB=None):
        BinaryGate.__init__(self, n, pA, pB)
```

→ Sonuç: pA= 0 pB= 1

g1: BinaryGate

→ BinaryGate.__init__(g1, “G1”, 0, 1)

```
class BinaryGate(LogicGate):
        def__init__(self, n, pA, pB)
            LogicGate.__init__(self, n)
            self.pinA=pA
            self.pinB=pB
```

→ Sonuç: g1.pinA= 0 g1.pinB= 1

g1: logicGate

→ logicGate.__init__(g1, “G1”)

```python
class LogicGate:
        def __init__(self, n):
            self.label = n
```

→ Sonuç: g1.label= G1

g1 – genel sonuç

```
n = "G1"
g1.label = "G1"
pA = 0
pB = 1
self.pinA = 0
self.pinB = 1
```

g2 - genel sonuç

→ g2=AndGate(“G2”, 1, 1)

```
n = "G2"
g2.label = "G2"
pA = 1
pB = 1
self.pinA = 1
self.pinB = 1
```

g3

→ g3= OrGate(“G3”)

```
class OrGate(BinaryGate):
    def__init__(self, n, pA=None, pB=None):
        BinaryGate.__init__(self, n, pA, pB)
```

→ Sonuç: pA= None pB= None

g3: BinaryGate

→ BinaryGate.__init__(g3, “G3”, None, None)

```
class BinaryGate(LogicGate):
    def__init__(self, n, pA, pB)
        LogicGate.__init__(self, n)
        self.pinA = pA
        self.pinB = pB
```

→ Sonuç: self.pinA = None self.pinB = None

g3 – genel sonuç

```
n = "G3"
g3.label = "G3"
pA = None
pB = None
self.pinA = None
self.pinB = None
```

g4

→ g4= NotGate(“G4”)

```
class NotGate(UnaryGate):
        def __init__(self, n, p=None):
           UnaryGate.__init__(self, n, p)
```

→ Sonuç: p= None

g4: UnaryGate

→ UnaryGate.__init__(self, n, p)

```
class UnaryGate(LogicGate):
    def __init__(self, n, p):
        LogicGate.__init__(self, n)
        self.pin = p
```

→ Sonuç: g4.pin= None

g4: LogicGate

→ LogicGate.__init__(self, n)

```
class LogicGate:
    def __init__(self,n):
        self.label = n
```

→ Sonuç: g3.label= G3

g4 – genel sonuç

```
n = "G4"
g4.label = "G4"
p = None
self.pin = None
```

c1 – Connector

→ c1= Connector(g1,g3)

```
class Connector:
    def__init__(self,fgate,tgate):
        tgate.setNextPin=(fgate.getOutput)
```

→ Sonuç: fgate= g1 tgate= g3

c1 – setNextPin

→ tgate.setNextPin=(fgate.getOutput)

```
def setNextPin(self,source):
    if self.pinA == None:
        self.pinA = source
    else:
        if self.pinB == None:
            self.pinB = source
        else:
            print "Hata : Fazla Baglanti!"
def getOutput(self):
    self.output = self.performGateLogic()
    return self.output
```

c1 - genel sonuç

→ c1 sonuç

```
g3.pinA = g1 cikisi (0)
```

c2 - genel sonuç

→ c2 = Connector(g2,g3)

```
g3.pinB = g2 cikisi (1)
```

c3 - genel sonuç

→ c3 = Connector(g3,g4)

```
g4.pin = g3 cikisi (1)
```

g4

→ print g4.getOutput()

```
def getOutput():
    self.output = performGateLogic()
    return self.output
```

g4: performGateLogic

⟶ self.output= performGateLogic()

```
def performGateLogic(self):
    if self.getPin():
        return 0
    else:
        return 1
```

⟶ Sonuç: g4.output= 0