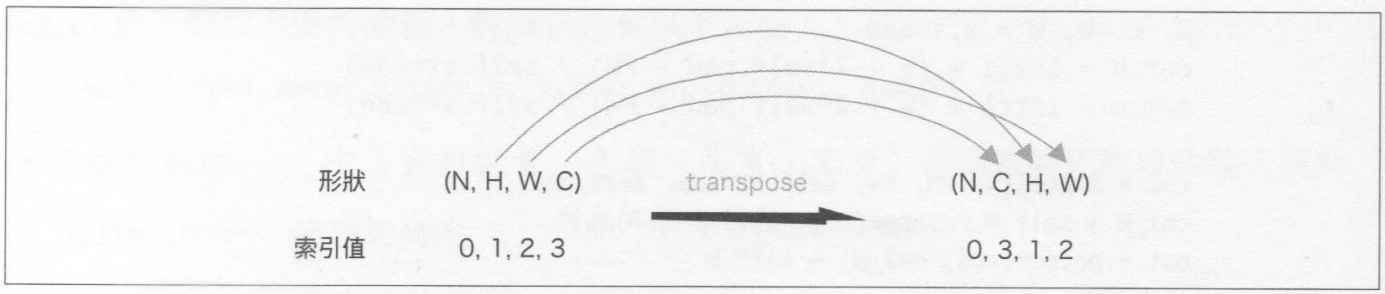
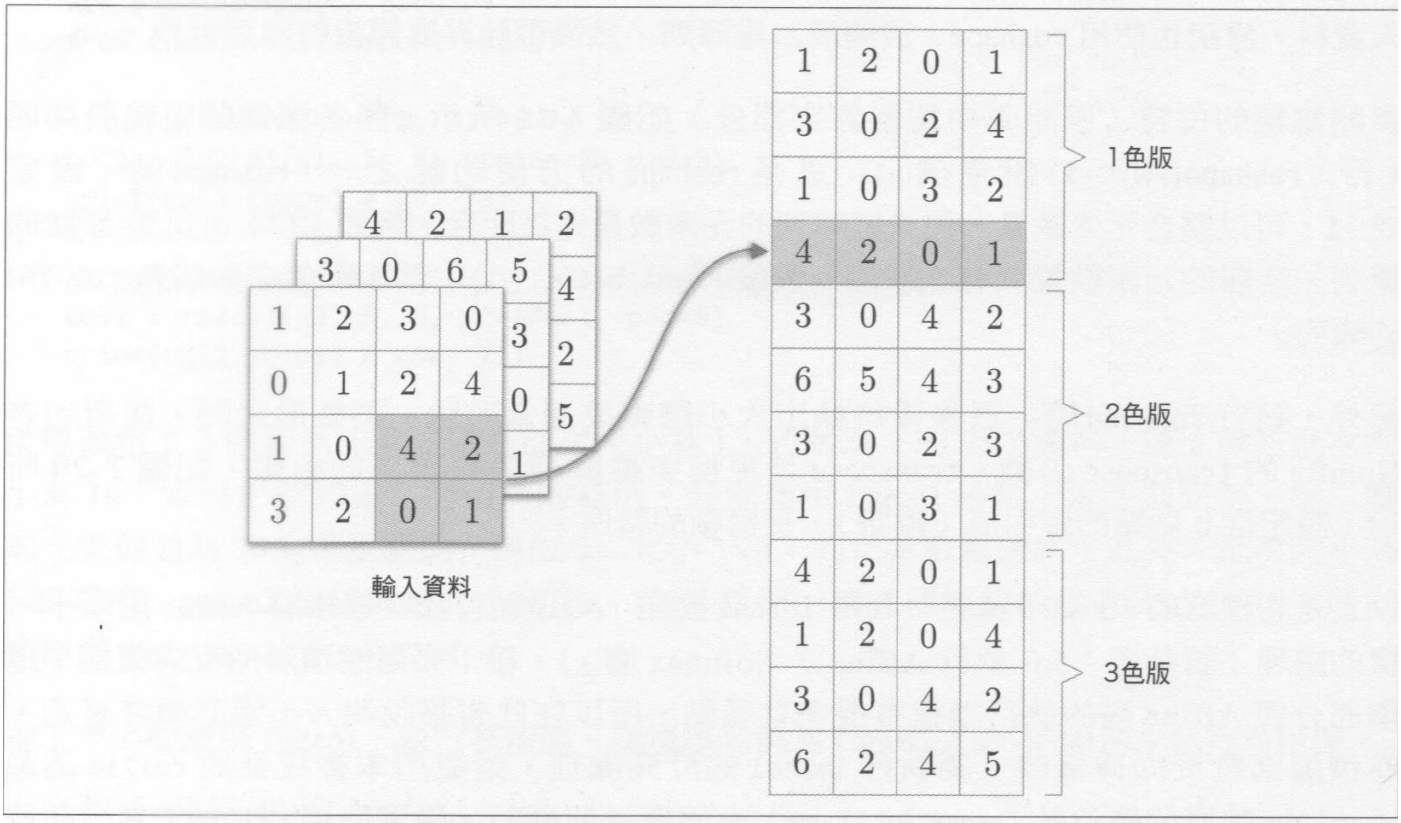
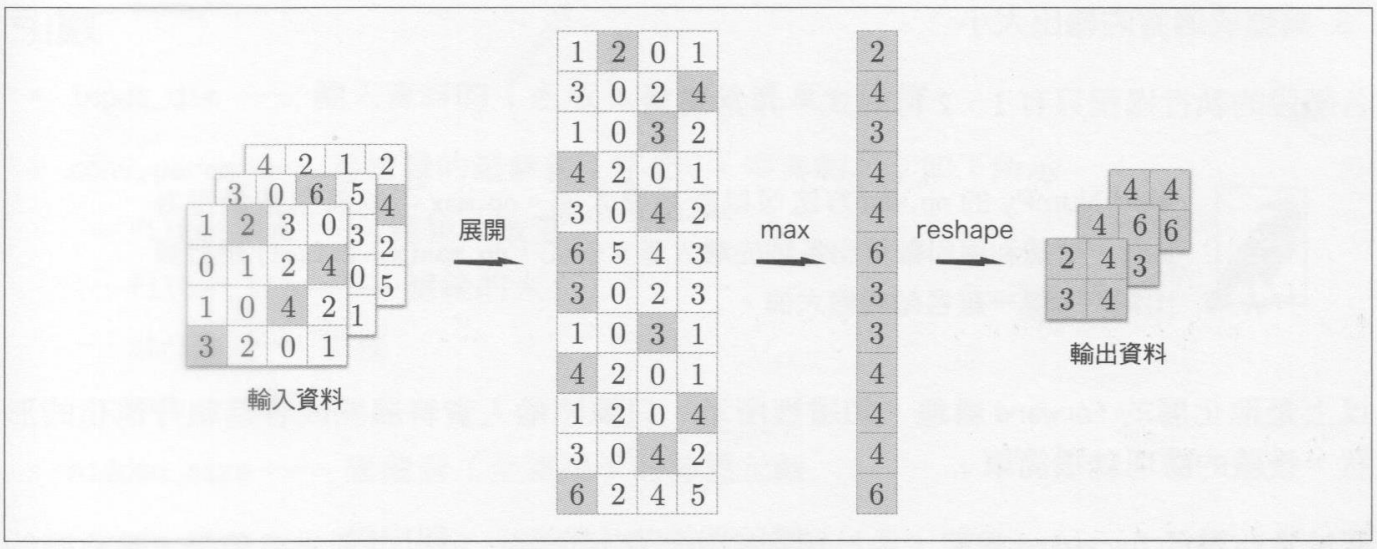
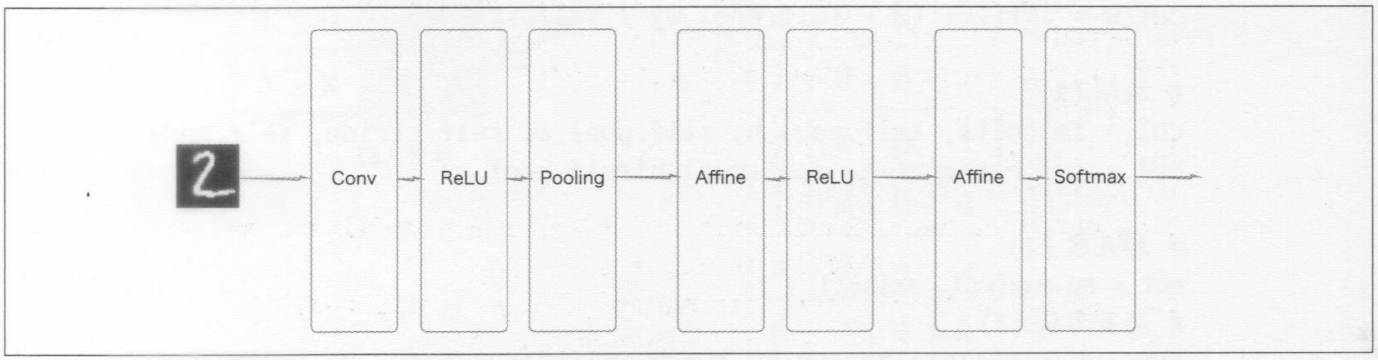
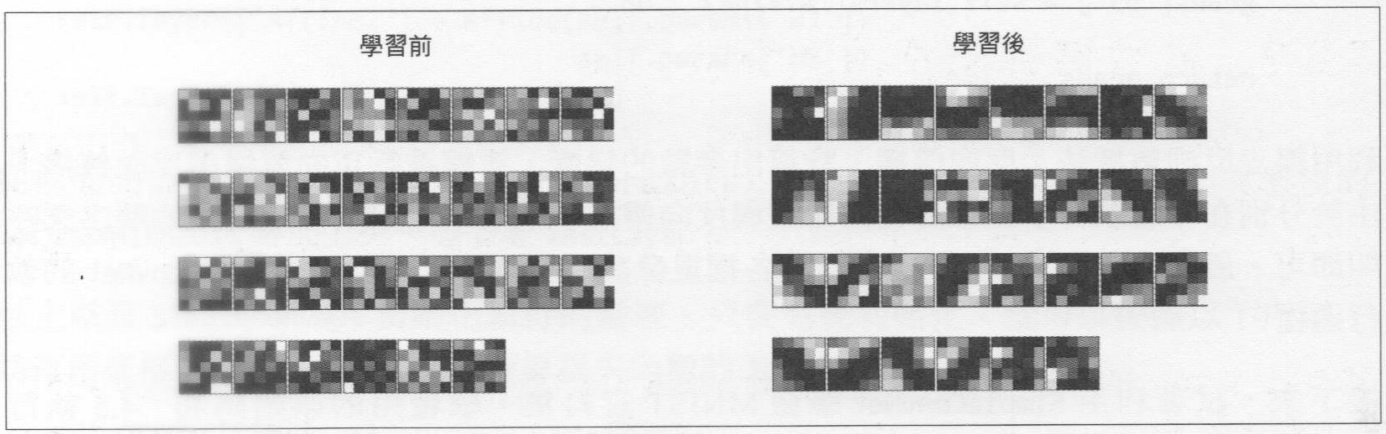
9_卷積網路與深度學習

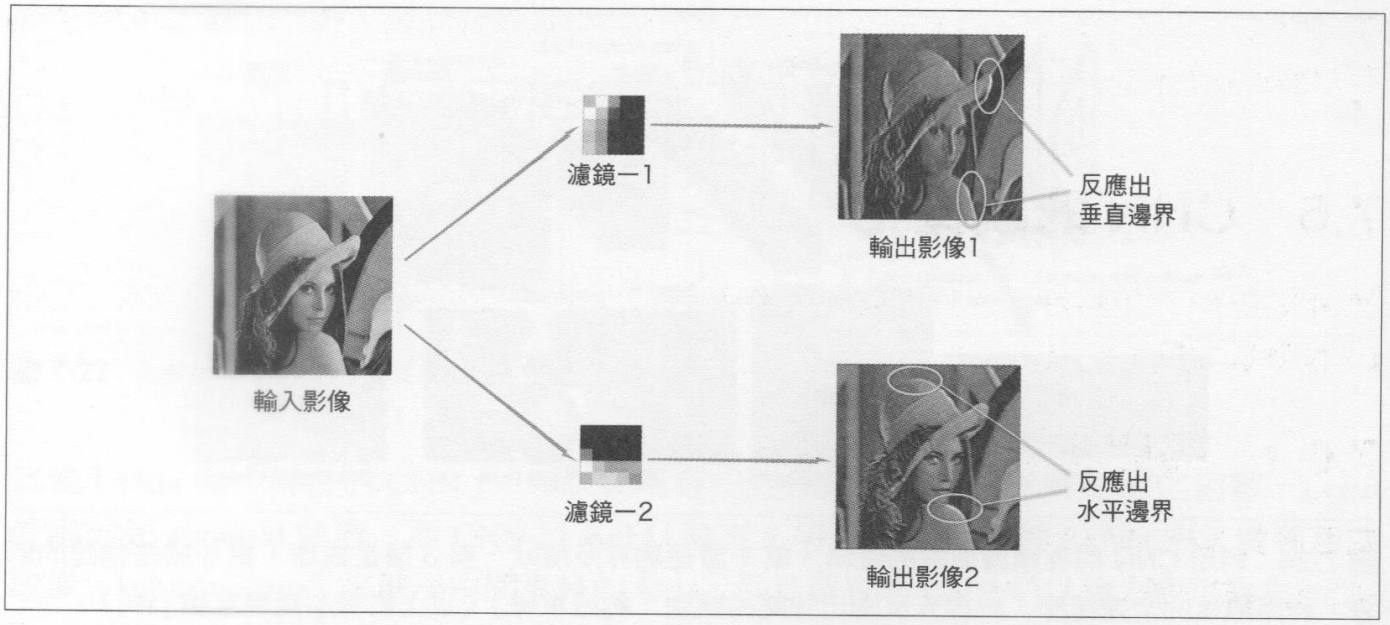

形狀
(N, H, W, C)
transpose
(N, C, H, W)
索引值
0, 1, 2, 3
0, 3, 1, 2

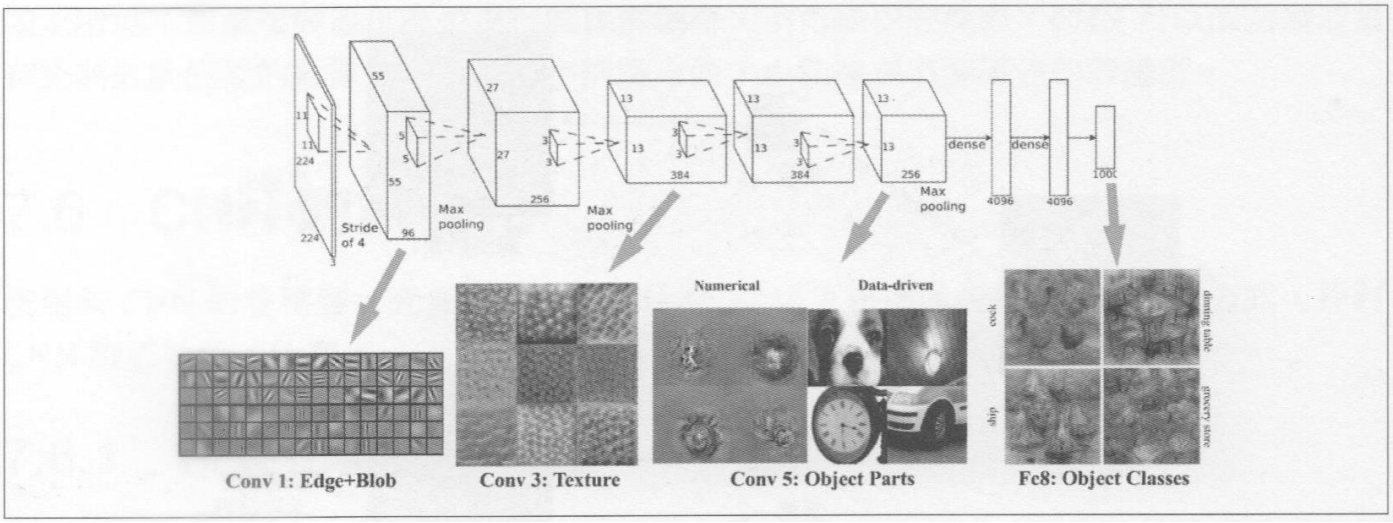

輸入資料
1色版
2色版
3色版

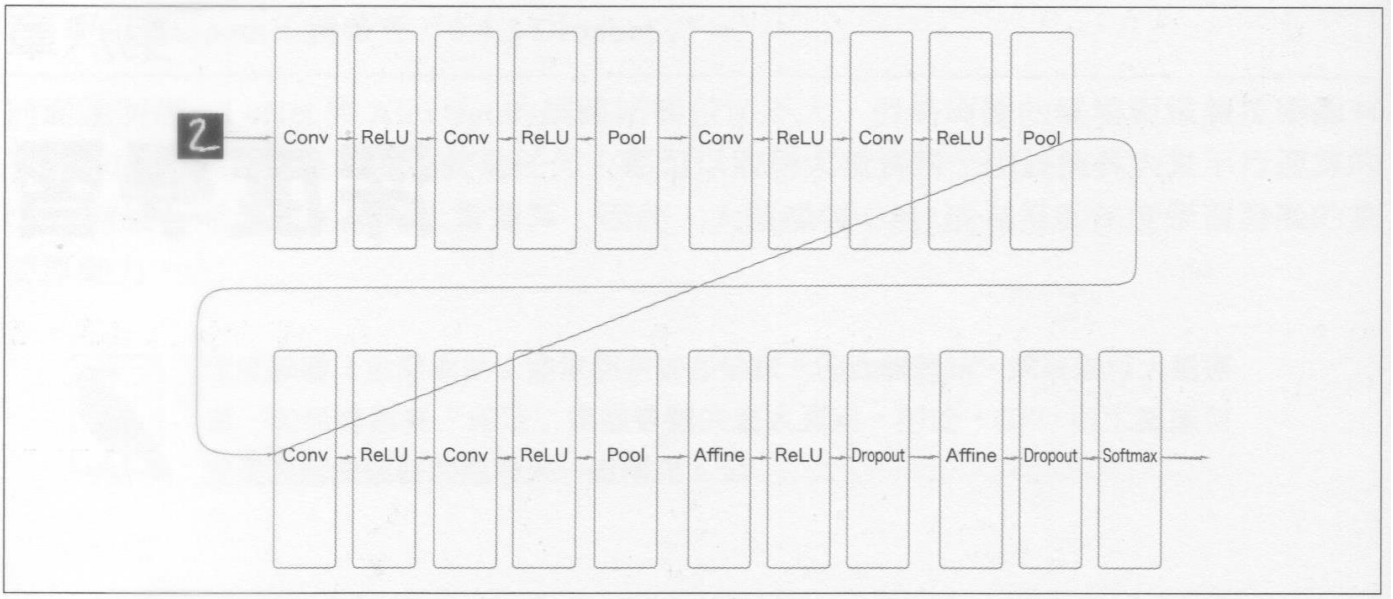

輸入資料
展開
max
reshape
輸出資料

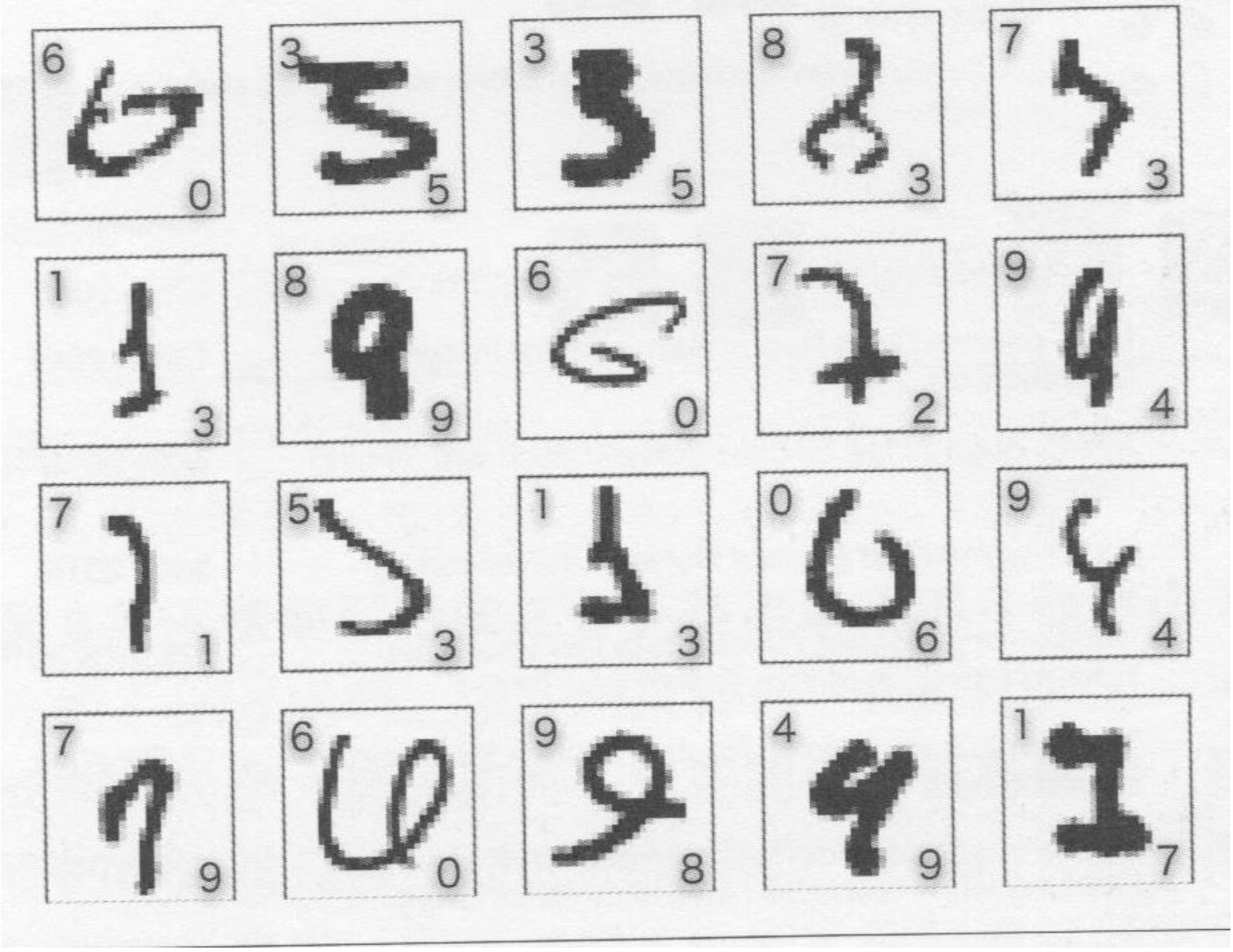

Conv
ReLU
Pooling
Affine
ReLU
Affine
Softmax


學習前
學習後


濾鏡一1
輸入影像
輸出影像1
反應出
垂直邊界
濾鏡一2
輸出影像2
反應出
水平邊界


224
224
11
11
3
55
55
96
Stride of 4
5
5
Max pooling
27
27
256
3
3
Max pooling
13
13
384
3
3
13
13
384
3
3
13
13
256
Max pooling
dense
dense
4096
4096
1000
Numerical
Data-driven
cock
ship
dining table
grocery store
Conv 1: Edge+Blob
Conv 3: Texture
Conv 5: Object Parts
Fc8: Object Classes


Conv
ReLU
Conv
ReLU
Pool
Conv
ReLU
Conv
ReLU
Pool
Conv
ReLU
Conv
ReLU
Pool
Affine
ReLU
Dropout
Affine
Dropout
Softmax


6 0
3 5
3 5
8 3
7 3
1 3
8 9
6 0
7 2
9 4
7 1
5 3
1 3
0 6
9 4
7 9
6 0
9 8
4 9
1 7