(Q1

1,2,2

```
array([[ 2,  3,  4],
       [ 7,  8,  9],
       [12, 13, 14]])

array([[1, 1, 1],
       [2, 2, 2],
       [3, 3, 3]])


(2-1)^2+(3-1)^2+(4-1)^2+(7-2)^2+(8-2)^2+(9-2)^2+(12-3)^2+(13-3)^2+(14-3)^2 = 426
```

1,2,3

Exactly the same

=426

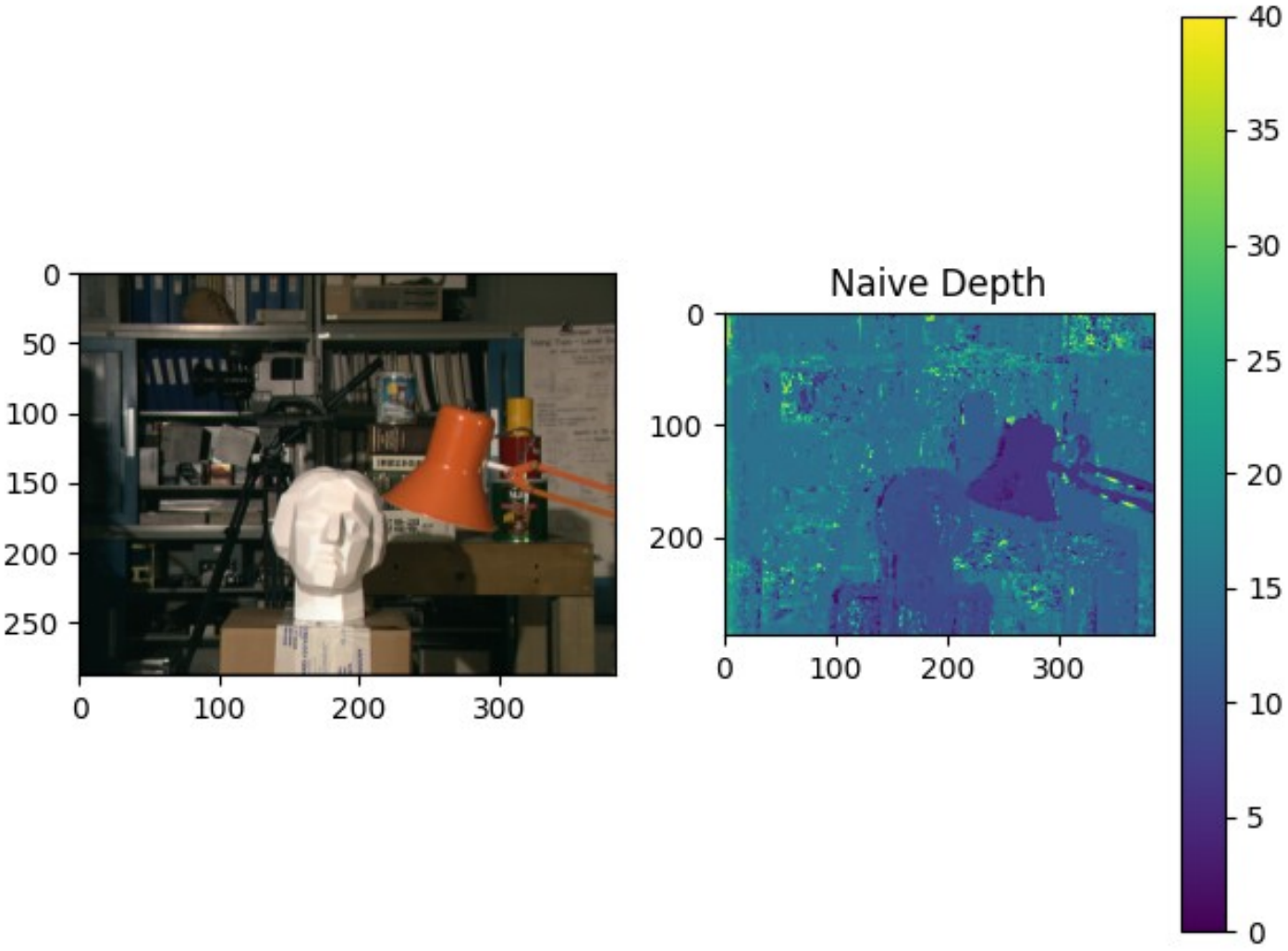
2,3,0

```
array([[ 8,  9, 10],
       [13, 14, 15],
       [18, 19, 20]])

array([[2, 2, 2],
       [3, 3, 3],
       [4, 4, 4]])

(8-2)^2+(9-2)^2+(10-2)^2+(13-3)^2+(14-3)^2+(15-3)^2+(18-4)^2+(19-4)^2+(20-
4)^2=1191
```

2,3,1

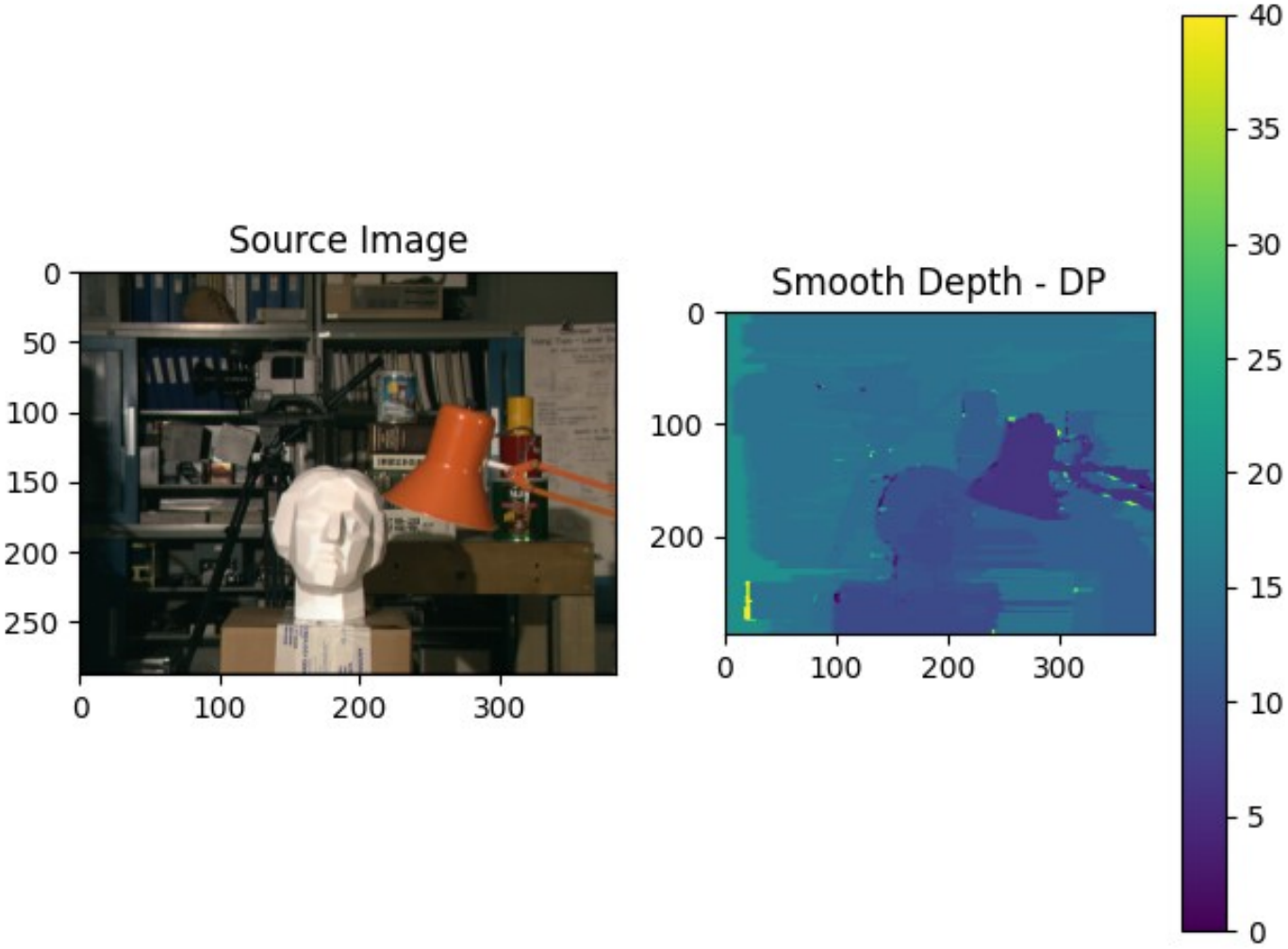
Exactly the same
=1191

(Q4



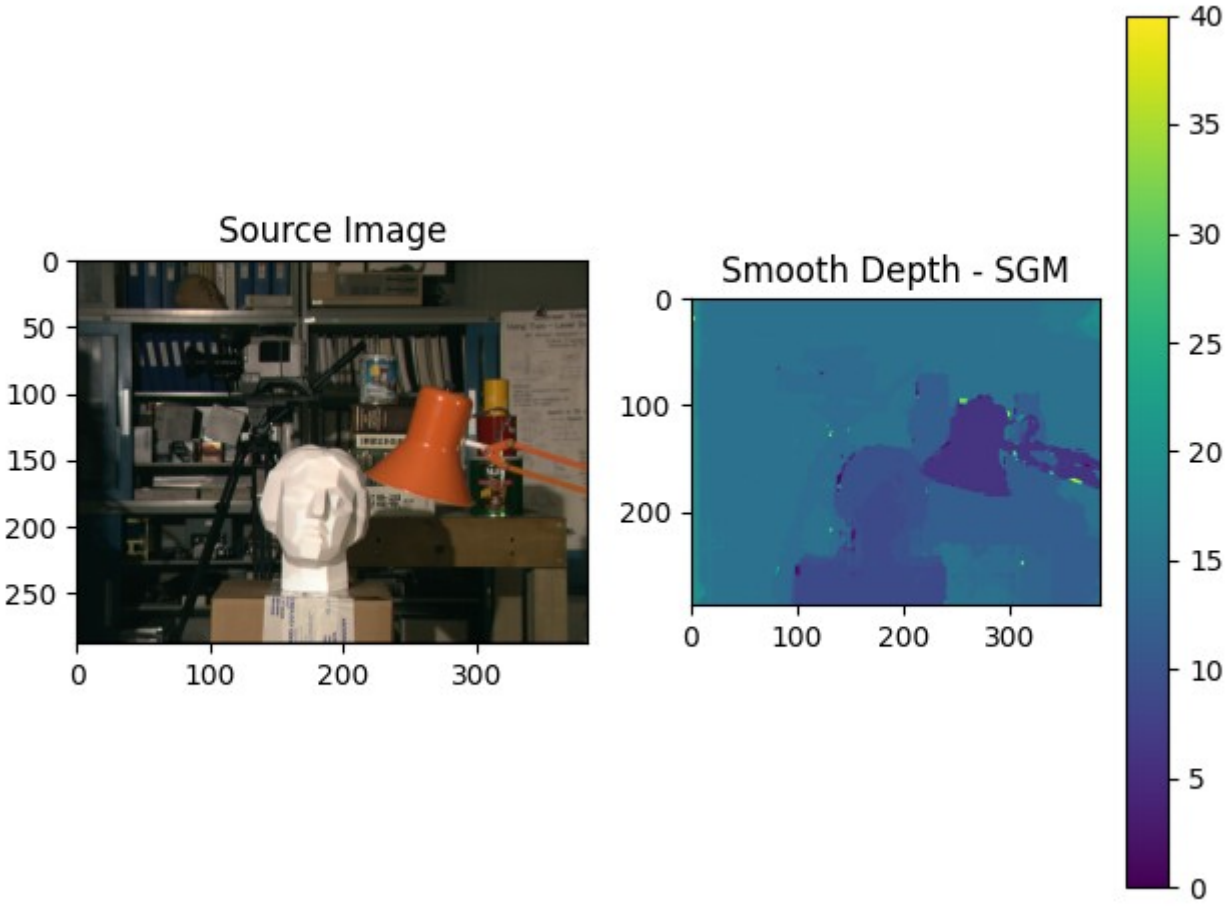
- We might notice that some different object are “mixed” into same region of depth because their sliding window is monotone (The white board example in class)
- We might notice that there is some noise of high depth across the image, this is because there could be several local minima because of noise.

(Q7

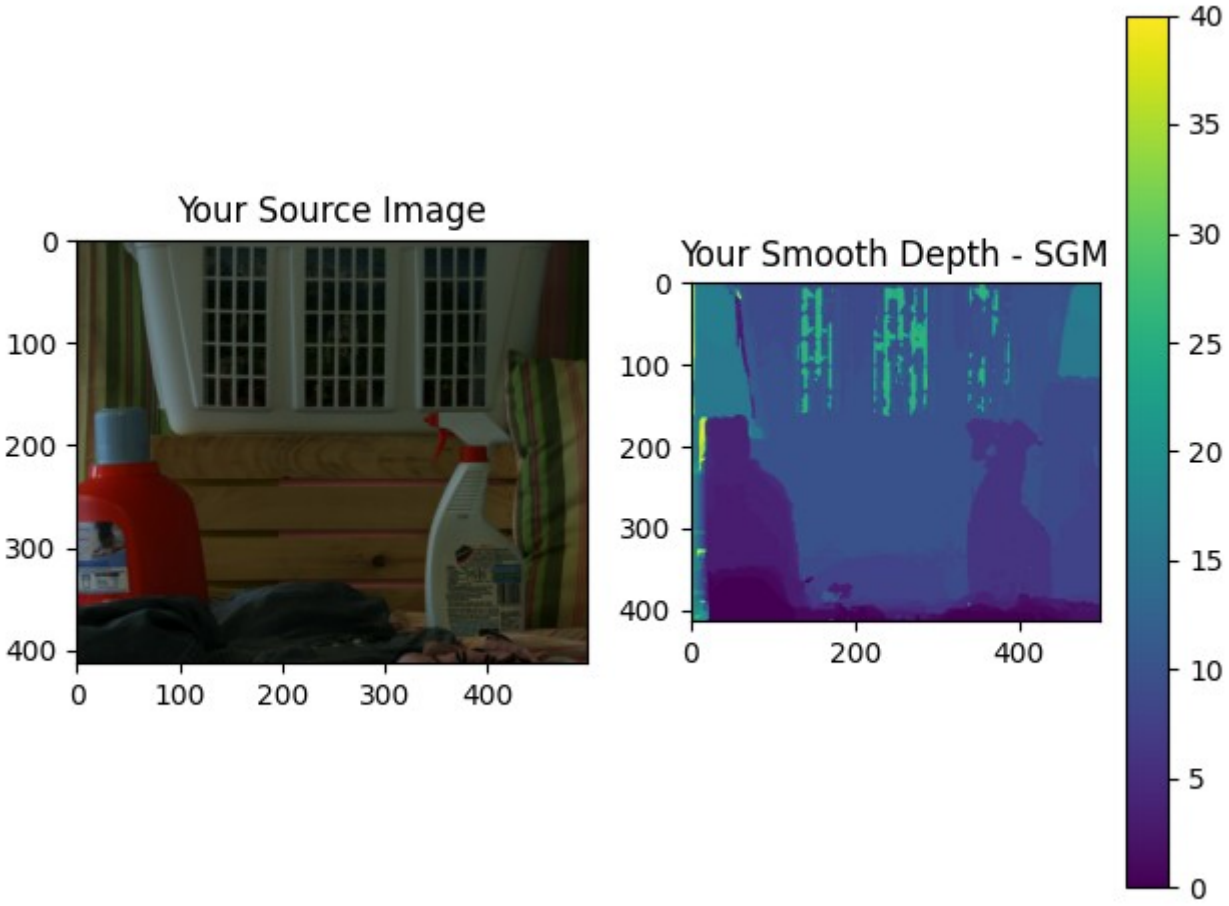


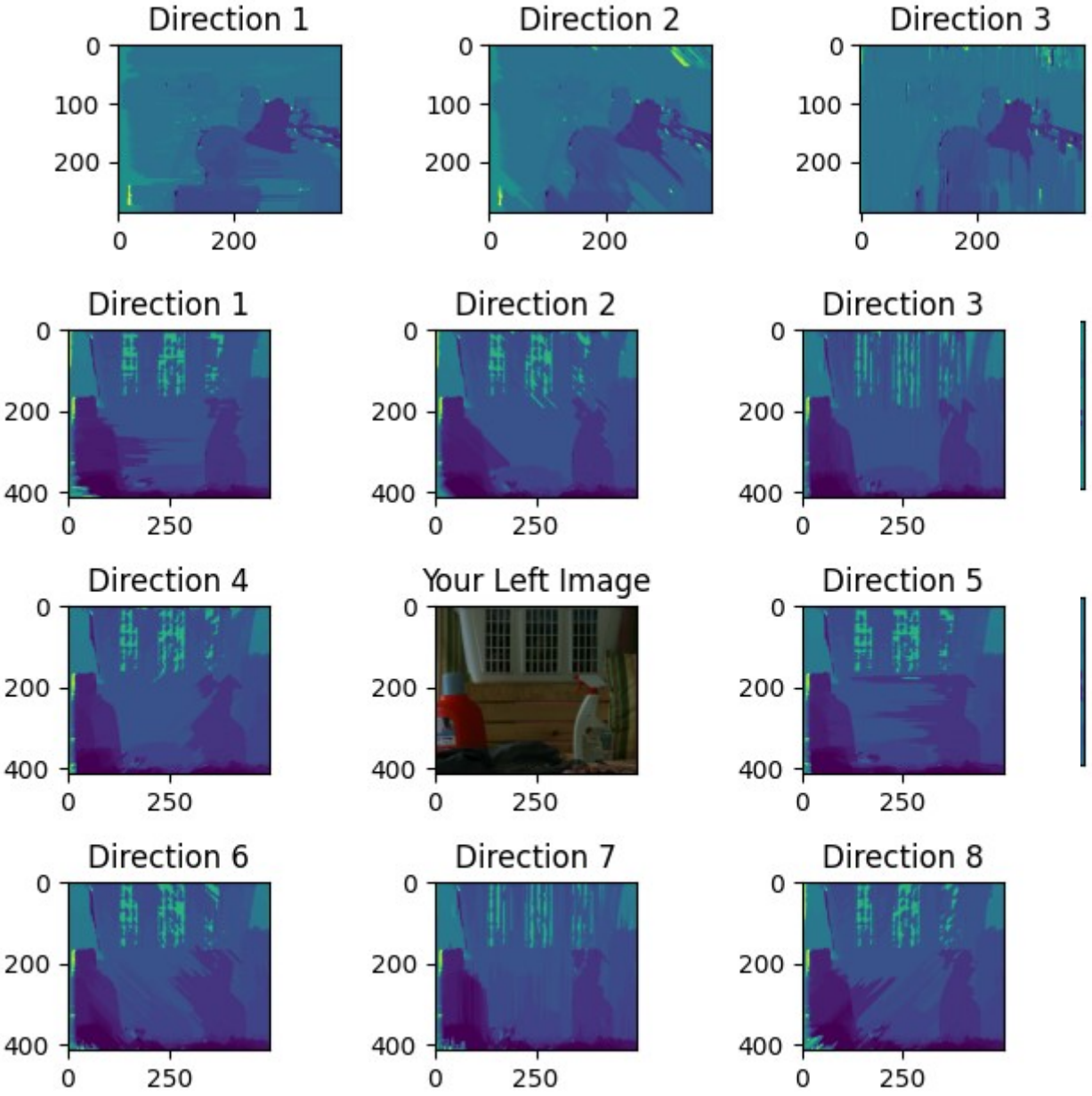
- Clearly a lot of the noisy points were smoothed by the algorithm

(Q11



- We received even smoother image, the single direction DP image was smeared to the right in several locations in the image while this one has more defined edges


Your Source Image
Your Smooth Depth - SGM
0
100
200
300
400
0
100
200
300
400
0
5
10
15
20
25
30
35
40


Direction 1
Direction 2
Direction 3
Direction 1
Direction 2
Direction 3
Direction 4
Your Left Image
Direction 5
Direction 6
Direction 7
Direction 8