CSC 330 – Artificial Intelligence

**Video #5 – Homework Assignment**

Consider the following portion of an image:

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10 | 15 | 12 | 6 | 4 |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 | 12 | 11 | 6 | 6 |  |  | 12 | 12 | 6 |  |  |  | 12 | 10 | 7 |  |
| 15 | 14 | 14 | 3 | 1 |  |  | 11 | 6 | 5 |  |  |  | 9 | 7 | 5 |  |
| 3 | 5 | 2 | 3 | 5 |  |  | 3 | 3 | 3 |  |  |  | 6 | 5 | 4 |  |
| 3 | 2 | 3 | 5 | 2 |  |  |  |  |  |  |  |  |  |  |  |  |
| ORIGINAL | | | | |  | MEDIAN | | | | |  | AVERAGE | | | | |

Fill the central 9 pixels with their values after performing the indicated filter on the original image.