CSC 330 – Artificial Intelligence

**Video #6 – Homework Assignment**

Consider the following portion of an image:

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10 | 15 | 12 | 6 | 4 |  |  |  |  |  |  |
| 10 | 12 | 11 | 6 | 6 |  |  | 6 | 26 | 26 |  |
| 15 | 14 | 14 | 3 | 1 |  |  | 23 | 26 | 19 |  |
| 3 | 5 | 2 | 3 | 5 |  |  | 35 | 23 | 13 |  |
| 3 | 2 | 3 | 5 | 2 |  |  |  |  |  |  |
| ORIGINAL | | | | |  | EDGE MAGNITUDE | | | | |

Perform an edge detection on this image. Fill the central 9 pixels with their magnitudes. Round values down.