## A problem for extra credit

We start with the table shown below. In one step, we may add 1 to all the numbers in any row or any column. We may repeat this step as many times as we want. Prove that it is not possible to reach nine odd numbers.

| 0 | 0 | 0 |
| :--- | :--- | :--- |
| 0 | 1 | 0 |
| 0 | 0 | 0 |

