|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Cnt 2 | Cnt 1 | Cnt 0 | birth\_num3 | birth\_num2 | birth\_num1 | birth\_num0 | Num |
| 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 0 | 0 | 1 | 1 | 0 | 0 | 1 | 9 |
| 0 | 1 | 0 | 1 | 0 | 0 | 1 | 9 |
| 0 | 1 | 1 | 1 | 0 | 0 | 1 | 9 |
| 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 1 | 0 | 1 | 0 | 0 | 0 | 1 | 1 |
| 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 |

birth\_num[3] = (!cnt[2] & cnt[0]) | ( !cnt[2] & cnt[1])

birth\_num[2] = 0

birth\_num[1] = 0

birth\_num[0] = (!cnt[2]) | (cnt[2] & !cnt[1]) | (cnt[2] & cnt[0])