|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **i3** | **i2** | **i1** | **i0** |  | **a** | **b** | **c** | **d** | **e** | **f** | **g** | **outrange** |
| 0 | 0 | 0 | 0 |  | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 |
| 0 | 0 | 0 | 1 |  | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 1 | 0 |  | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 |
| 0 | 0 | 1 | 1 |  | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 |
| 0 | 1 | 0 | 0 |  | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 |
| 0 | 1 | 0 | 1 |  | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 |
| 0 | 1 | 1 | 0 |  | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 |
| 0 | 1 | 1 | 1 |  | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| 1 | 0 | 0 | 0 |  | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 |
| 1 | 0 | 0 | 1 |  | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 |
| 1 | 0 | 1 | 0 |  | x | x | x | x | x | x | x | 1 |
| 1 | 0 | 1 | 1 |  | x | x | x | x | x | x | x | 1 |
| 1 | 1 | 0 | 0 |  | x | x | x | x | x | x | x | 1 |
| 1 | 1 | 0 | 1 |  | x | x | x | x | x | x | x | 1 |
| 1 | 1 | 1 | 0 |  | x | x | x | x | x | x | x | 1 |
| 1 | 1 | 1 | 1 |  | x | x | x | x | x | x | x | 1 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | ’.’ | ’. | . | .’ |
| ’.’ | 1 | 0 | 1 | 1 |
| ’. | 0 | 1 | 1 | 1 |
| . | X | X | X | X |
| .’ | 1 | 1 | X | X |

a = + + ’.’ + .

b = + +

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | ’.’ | ’. | . | .’ |
| ’.’ | 1 | 1 | 1 | 1 |
| ’. | 1 | 0 | 1 | 0 |
| . | X | X | X | X |
| .’ | 1 | 1 | X | X |

c = + +

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | ’.’ | ’. | . | .’ |
| ’.’ | 1 | 1 | 1 | 0 |
| ’. | 1 | 1 | 1 | 1 |
| . | X | X | X | X |
| .’ | 1 | 1 | X | X |

*d* = + ’ + + +

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | ’.’ | ’. | . | .’ |
| ’.’ | 1 | 0 | 1 | 1 |
| ’. | 0 | 1 | 0 | 1 |
| . | X | X | X | X |
| .’ | 1 | 1 | X | X |

e = +

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | ’.’ | ’. | . | .’ |
| ’.’ | 1 | 0 | 0 | 1 |
| ’. | 0 | 0 | 0 | 1 |
| . | X | X | X | X |
| .’ | 1 | 0 | X | X |

f = + ’’ + ’ + ’

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | ’.’ | ’. | . | .’ |
| ’.’ | 1 | 0 | 0 | 0 |
| ’. | 1 | 1 | 0 | 1 |
| . | X | X | X | X |
| .’ | 1 | 1 | X | X |

g =  + ’+ ’ + ’

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | ’. ’ | ’. | . | . ’ |
| ’. ’ | 0 | 0 | 1 | 1 |
| ’. | 1 | 1 | 0 | 1 |
| . | x | x | x | x |
| . ’ | 1 | 1 | x | x |