Consider the following program:

```c
for (i = 0; i < n; i += 1) {
    for (j = 0; j < n; j += 1) {
    }
}
```

A[i, j] means the element at the i-th row and j-th column in the 2-dimensional array A. Ignore out-of-bound array access.

What is the distance vector for these loops?

Assume that n = 4. Draw the iteration space grid below, using dots to represent the values of i and j for an iteration and arrows to represent dependencies.