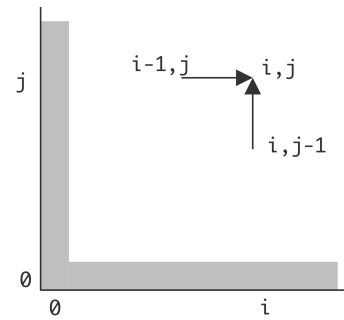


Quiz

You name:

Consider the following code:

```
for i in [1:N]:  
    x[0,i] = some_function_of(i)  
    x[i,0] = some_function_of(i)  
  
for i in [1:N]:  
    for j in [1:N]:  
        sum = 0  
        x[i,j] = x[i-1,j]+x[i,j-1]
```



Answer the following questions about the double i, j loop:

1. Are the iterations of the inner loop independent, that is, could they be executed simultaneously?
2. Are the iterations of the outer loop independent?
3. If $x[1,1]$ is known, show that $x[2,1]$ and $x[1,2]$ can be computed independently.
4. Does this give you an idea for a parallelization strategy?