1. Color pixels in the grid below to form a line between the two points $p$ and $q$ using the midpoint algorithm.
2. Implement a faster version of slow_line, below, by doing as much precomputation as possible before the loop.

```plaintext
function slow_line(p1, p2):
  // compute m, b
  for x = ceil(x0) to floor(x1)
    y = b + m*x
    draw(x, round(y))

function fast_line(p1, p2):
  // compute m, b
  for x =
    draw(x, round(y))
```