Exercise 2

Sketch the vector field \mathbf{F} by drawing a diagram like Figure 5 or Figure 9.

$$\mathbf{F}(x,y) = \frac{1}{2}x\,\mathbf{i} + y\,\mathbf{j}$$

Solution

Below is a plot of the vector field in the xy-plane. The length and hue of each vector indicate its magnitude.

