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Building seven diagonal symmetric matrix

This kind of matrix appears when assembling stiffness matrix for a beam using standard 2D beam element.

The script below builds and solves a system with seven diagonal symmetric matrix

```
d = [10, 21, 12, 33, 14, -15 ]
e = [2, 1.1 5.2 2.3 -2.4]
f = [1.0 3.1 1.2 2.3]
g = [0.1 -0.2 1.3]
b= transpose([1.0 2.1 1.2 4.3 1.4 6.5])
A = diag(d) + diag(e,1) + diag(e,-1) + diag(f,2) + diag(f,-2) + diag(g,3) +
diag(g,-3)
A\b
```