

## Linear solvers

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```

We demonstrate solving a dense system  $Ax=b$  by using different linear solvers.

```
14 from casadi import *  
15 from numpy import *  
16 import time  
17  
18 n=100  
19 A=DM([[cos(i*j)-sin(i) for i in range(n)] for j in range(n)])  
20 x=DM([tan(i) for i in range(n)])
```

We generate the b vector:

```
23 b=mtimes(A, x)
```