

# CHOLSKY WITH SCIPY AND NUMPY RESULTS:

N: 100	N: 1000	N: 10000
A1 x = b1	A1 x = b1	A1 x = b1
Ten median x are:	Ten median x are:	Ten median x are:
[[1.]	[[1.000000004]	[[0.99996061]
[1.]	[1.000000004]	[0.99996061]
[1.]	[1.000000004]	[0.9999606 ]
[1.]	[1.000000004]	[0.9999606 ]
[1.]	[1.000000004]	[0.9999606 ]
[1.]	[1.000000004]	[0.9999606 ]
[1.]	[1.000000004]	[0.9999606 ]
[1.]	[1.000000004]	[0.9999606 ]
[1.]	[1.000000004]	[0.9999606 ]
[1.]]	[1.000000004]]	[0.9999606 ]]
A2 x = b2	A2 x = b2	A2 x = b2
Ten median x are:	Ten median x are:	Ten median x are:
[[1.]	[[1.]	[[1.]
[1.]	[1.]	[1.]
[1.]	[1.]	[1.]
[1.]	[1.]	[1.]
[1.]	[1.]	[1.]
[1.]	[1.]	[1.]
[1.]	[1.]	[1.]
[1.]	[1.]	[1.]
[1.]	[1.]	[1.]
[1.]]	[1.]]	[1.]]

## CHOLSKY WITH SCIPY AND NUMPY AND {4.FLOAT} PRECISION RESULTS:

N: 100	N: 1000	N: 10000
A1 x = b1	A1 x = b1	A1 x = b1
Ten median x are:	Ten median x are:	Ten median x are:
[[1.0000]	[[1.0000]	[[1.0000]
[1.0000]	[1.0000]	[1.0000]
[1.0000]	[1.0000]	[1.0000]
[1.0000]	[1.0000]	[1.0000]
[1.0000]	[1.0000]	[1.0000]
[1.0000]	[1.0000]	[1.0000]
[1.0000]	[1.0000]	[1.0000]
[1.0000]	[1.0000]	[1.0000]
[1.0000]	[1.0000]	[1.0000]
[1.0000]]	[1.0000]]	[1.0000]]
A2 x = b2	A2 x = b2	A2 x = b2
Ten median x are:	Ten median x are:	Ten median x are:
[[1.0000]	[[1.0000]	[[1.0000]
[1.0000]	[1.0000]	[1.0000]
[1.0000]	[1.0000]	[1.0000]
[1.0000]	[1.0000]	[1.0000]
[1.0000]	[1.0000]	[1.0000]
[1.0000]	[1.0000]	[1.0000]
[1.0000]	[1.0000]	[1.0000]
[1.0000]	[1.0000]	[1.0000]
[1.0000]	[1.0000]	[1.0000]
[1.0000]	[1.0000]	[1.0000]
[1.0000]]	[1.0000]]	[1.0000]]

CHOLESKY WITHOUT SCIPY (HARDCODED) :

```
N = 100
A1 x = b1
  Ten median x are:
[1. 1. 1. 1. 1. 1. 1. 1. 1. 1.]
A2 x = b2
  Ten median x are:
[1. 1. 1. 1. 1. 1. 1. 1. 1.]
```

```
N = 1000
A1 x = b1
  Ten median x are:
[1.000000006 1.000000006 1.000000006 1.000000006 1.000000006 1.000000006
 1.000000006 1.000000006 1.000000006 1.000000006]
A2 x = b2
  Ten median x are:
[1. 1. 1. 1. 1. 1. 1. 1. 1. 1.]
```

CHOLESKY(HARDCODED) WITHOUT SCIPY AND WITH {4.FLOAT} PRECISION RESULTS:

```
N = 100
A1 x = b1
  Ten median x are:
[1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000]
A2 x = b2
  Ten median x are:
[1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000]

N = 1000
A1 x = b1
  Ten median x are:
[1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000]
A2 x = b2
  Ten median x are:
[1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000]
```