

The  $A$  matrix is:

$$A = \begin{bmatrix} 17.4 & \{-32.1, -31.5, -30.3\} & \text{Unif}(23.4, 25.0) \\ -6.1 & \text{Unif}(27.0, 31.5) & \{50.2, 51.3\} \\ \text{Gauss}(5.3, 1) & \{-18.2, -16.0\} & \text{Unif}(26.9, 30.2) \end{bmatrix}$$

The  $b$  vector is :

$$b = \begin{bmatrix} \text{Gauss}(-13.3, 1.2) \\ \{16.5, 17.3\} \\ 3.4 \end{bmatrix}$$

A screenshot input file for this is the text file shown below. It is attached as the file `input3Vars` in the repo.

```
3
custom,17.4
custom,-32.1,-31.5,-30.3
unif,23.4,25.0
custom,-6.1
unif,27.0,31.5
custom,50.2,51.3
gauss,5.3,1
custom,-18.2,-16.0
unif, 26.9,30.2
gauss,-13.3,1.2
custom, 16.5,17.3
custom, 3.4
```

On solving  $Ax = b$

Gauss triangulation, Gauss Jordan and R simulation give the following distributions of the solution

