

# **Operations Research: theory and applications to networking**

## Useful commands

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## Mosel commands:

setrandseed(integer) !set a different seed for each run.  
For example: setrandseed(4) sets the seed to 4.

Function random returns a uniformly distributed number in  $[0,1]$ .

Example of application: how to generate a matrix of Uniform[a,b] numbers

```
forall(n,m in NODES | n <> m) do  
Weights(n,m):= a+(random*(b-a))  
end-do
```

# If statements in Mosel

```
if Bool_exp_1
then Statement_list_1
[
  elif Bool_exp_2
  then Statement_list_2
...]
[ else Statement_list_E ]
end-if
```

More information available at: <https://www.fico.com/fico-xpress-optimization/docs/latest/mosel/UG/dhtml/GUID-5DBA5E00-B9BC-3A85-A9AF-A03B2F564C43.html>