

# Workshop Maputo



## Testing

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# Notebook

- In the powershell and in Maputo\_Workshop
  - `git pull`
- Start notebook:
  - `python -m notebook`
- Rename the notebook
  - Change the name '**Test**' to your name
- Hands on
  - Implement your solutions
- Save (Ctrl+S) and send me (before 14:40) notebook
  - Send it to [syso@mail.muni.cz](mailto:syso@mail.muni.cz) (I will confirm the receipt

## Practical test

- Helper function:  
extract\_bits(value= 4844, lsb\_bit=2, msb\_bit=5)
  - Indexing from 0, lsb\_bit=2(including), up to msb=5 (excluding)
  - 1001011101100 => 011 in binary = 3 in decadic
- Non-cryptographic generator (java.util.Random)
  - Check the page [LCG](#) to see which bits should be returned
- Number theoretic designs (BBS)
  - $\text{State} = \text{State} * \text{State} \bmod M$
  - next\_bit() – lsb (as integer) of the state should be returned
  - next\_byte() – 8 generated bits should be concatenated and returned as integer