# Task 1

Timm Ruland & Boris Prochnau

April 20, 2014

- What does it do?
  it prints two not sufficiently seeded "random" variables
- The difference between the methods is that rand() returns a random number and the other method
  - rand() returns a random integer between 0 and RANDMAX
  - gsl_rng_mt19937 is a generator that generates random numbers

  In the code the generator is passed to a (Distribution)function that uses this generator to evaluate a random number depending on the Distribution specified in the function.
- What happens if you remove the expression (double)?
  The division operation $\frac{rand()}{RANDMAX}$ does $\frac{intSmall}{intBig}$ and should result in a double, but with no cast it will be floored to 0.
- Is there a direct function to generate normally distributed random variables?
  double gsl_ran_gaussian_pdf(const gsl_rng * r, double sigma) command