**Test task for Java developer (Math implementation)**

**1. Implement lottery engine for Powerball lottery. Game rules:**

https://en.wikipedia.org/wiki/Powerball#Playing\_the\_game (use the latest rules of October 7, 2015: pick 5 of 69 and 1 of 26 for Power Ball).

Power Play feature is not mandatory. Lottery engine requirements:

-register tickets;

-perform draw and assign ticket wins.

**2. Alongside with the lottery engine, there must be an integration test that verifies engine correctness. It must simulate players behavior:**

-perform ticket registration;

-collect wins;

-calculate total outcome and compare it with the theoretical probability.

Providing detailed statistics for all winning options separately is an advantage.

**Note:**

The assignment should be written in Java as a library, its goal is to implement game logic. Simple lottery engine unit-test may be added to verify draw process.