D individual task in discrete math:

Edited at 10am 10 April 2017.

s is your student number. k = s mod 10000. T = s mod 100. m = s mod 35. a = s mod 25.

L = s mod 10. $d\_{2}=\frac{T-L}{10}$. e = s mod 8. m7 = s mod 7. m6 = s mod 6. m4 = s mod 4. m3 = s mod 3.

m2 = s mod 2.

**Number theory:**

1. Convert T to e+2 and L+2 counting systems.

http://discrete4math.weebly.com/uploads/2/5/3/9/25393482/number2convert.txt

2. Calculate the largest prime number you can using your own computer code.

http://discrete4math.weebly.com/uploads/2/5/3/9/25393482/primes2find.txt

3. Give prime factorization of s.

http://discrete4math.weebly.com/uploads/2/5/3/9/25393482/prime4factorization4of4numbers.txt

**Combinatorics:**

4. Calculate C(9,e) and P(7,e).

5. Give all the options for C(e+3,e).

http://discrete4math.weebly.com/uploads/2/5/3/9/25393482/calculator4combinations.txt

6. In how many ways can you answer an exam with m+1 questions each of which has e+1 options for the answer?

**Probability:**

7. Draw the histogram of tossing L+2 fair coins.

8. Draw the histogram of the first e+3 digits of π.

9. Give the histogram of Behford of the first digit of e+2 the most populated countries.

http://www.worldometers.info/world-population/population-by-country/

Games:

10. Join Dota2 gaming competition.

http://www.dota2.com/international/overview/

Project:

11. Improve your project.

Write the proposal.

Prepare to present your project to a native English speaking doctor of science.

Deadline: 15.4.2017 Saturday.