**Last class quiz.**

Your name:

Your hobby:

Your favorite sport:

1. Dijkstra was a ... mathematician.

   ◯ hungarian ◯ canadian ◯ german ◯ dutch

2. The speed of the faster computer in the world is 1685 PFLOPS (peta = $10^{15}$, FLOPS = FLoating-point Operations Per Second).
   We are given an algorithm with running time $2^n$ steps (where one step is one floating point operation). What is the largest size of the input that this computer will finish computing the result of this algorithm in one day:

   ◯ 34 ◯ 76 ◯ 231 ◯ 350

3. Let $N$ be your answer for the previous problem. If we run an input of size $N$ for an algorithm with running time $3^n$ steps on the above machine, how much time will this machine take?

   ◯ 10 days ◯ 34 years ◯ 13500 years ◯ half of the age of the universe ◯ twice the age of the universe

4. The AKS algorithm, that shows PRIMES are in P, was found by computer scientists from which university?

   ◯ BME, Hungary ◯ IIT, Kanpur, India ◯ MIT, US ◯ Oxford University, UK

5. AVL-trees are balanced binary search trees. How many names are there in the abbreviation AVL?

   ◯ 1 ◯ 2 ◯ 3

6. Which was discovered first AVL-tree or Red-Black tree?

   ◯ AVL tree ◯ Red-Black tree ◯ about the same time

7. Kruskal's algorithm was discovered in ... by a ... mathematician.

   ◯ 1948, american ◯ 1956, american ◯ 1961, german ◯ 1954, hungarian

8. Prim's algorithm was discovered in ... by ....

   ◯ 1930, Jarnik ◯ 1957, Prim ◯ 1959, Dijkstra

9. In which of the following countries have I not studied in a college?

   ◯ India ◯ USA ◯ Switzerland ◯ Hungary

Any question you'd like to ask from me?