Discussion Question

Lin Tao

Discussion Question for 1.1-1.4

- What is the basic instructions in all programming languages?

- What is an algorithm?

- Does Java code changed to machine code directly?

Discussion Question for 1.5-1.9

- Two ways to print the following sentence on screen:

    This course is:
    Intro to "CS"

    We can try to print this first (without quotation mark "" in CS):
    This course is:
    Intro to CS

Discussion Question 06/19

- Read the very short book in Google Doc:
- *Dori-Mic and the Universal Machine from Page 10 to 11*

- ***Question**:*
- *How many different patterns for pop-up toy in Page 10?*

Discussion Question 06/19

- Why CPU cannot bigger than about 0.1 m?

Discussion Question 06/23
Nim Game

- You are playing the following Nim Game with your friend: There is a heap of stones on the table, each time one of you take turns to remove 1 to 3 stones. The one who removes the last stone will be the winner. You will take the first turn to remove the stones.

- Both of you are very clever and have optimal strategies for the game. Write a function to determine whether you can win the game given the number of stones in the heap.

Discussion Question 07/06

Given a non-negative integer c , your task is to decide whether there're two integers a and b such that $a^2 + b^2 = c$.

Example 1:

```
Input: 5
Output: True
Explanation: 1 * 1 + 2 * 2 = 5
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Example 2:

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Input: 3
Output: False
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