

CS1020E Tutorial + Lab 05

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Tutorial Solutions

“Tutorial 5 – Linked List”

Question 1: Linked List Operations

What is the purpose of the class `GuessWhatThisIs`?

- **Answer:**

Question 1: Linked List Operations

What is the purpose of the class `GuessWhatThisIs`?

- **Answer:** it is an iterator (i.e. points to an object and can move from one node to another).

Question 1: Linked List Operations

What does each operation in `mysteryA()`, `...`, `mysteryL()` do?

And what is the STL equivalent?

- `mysteryA()` \longrightarrow `empty()`.
- `mysteryB()` \longrightarrow `size()`.
- `mysteryC()` \longrightarrow `front()`.
- `mysteryD()` \longrightarrow `back()`.
- `mysteryE(T& elm)` \longrightarrow `push_back(T& elm)`.
- `mysteryF(T& elm)` \longrightarrow `push_front(T& elm)`

Question 1: Linked List Operations

What does each operation in `mysteryA()`, ..., `mysteryL()` do?

And what is the STL equivalent?

- `mysteryG()` \longrightarrow `pop_front()`.
- `mysteryH()` \longrightarrow `pop_back()`.
- `mysteryI()` \longrightarrow `begin()`.
- `mysteryJ()` \longrightarrow `end()`.
- `mysteryK(iterator, T& elm)` \rightarrow `insert(iterator, T& elm)`.
- `mysteryL(iterator)` \longrightarrow `erase(iterator)`

End of Tutorial Discussion

Note: Detailed solutions (i.e. the file T5_ans.pdf) will be released soon at

<http://www.comp.nus.edu.sg/~stevenha/cs1020e.html>

Take Home Lab 03

Hint: Use Linked List.

Let's take a short break!

Extra Practice

- <https://open.kattis.com/problems/aaah>
- <https://open.kattis.com/problems/mixedfractions>
- <https://open.kattis.com/problems/everywhere>

Any Questions?

See you next week!