Texel Student exercise #1

Given the example input:

“A”>”B”
“A”>”F”
“B”>”dd”
“c”<”L”
etc....

which is a finite set of relationships.

“immediate” relationships are explictely defined in the input.
deduced relationships, can be calculated when processing the entire feature

1. Please describe what is the data structure or structures you would use or create that would support a program that given an item identity, would answer which immediate item/s are bigger and which immediate items are smaller.
   E.g. for the above example if “A” is given, that B and F are smaller, and no one is bigger.

2. Can there be an input which would not make sense? If there is such an input how would you check for it?
3. That would Write several test cases: inputs an expected output/s
4. Write a program in either java/python/c#/c++ that reads the relationship from a file and output to the console the items all the items satisfying partial order.
5. Write several test cases, inputs and expected output/s. please thing about “positive” testing - test that should pass, and “negative” tests - tests that should break.

Notes:
When implementing, think about the order of complexity in your implementation on insert of new data, and also the explicit functionality requested.