Questions week 4

1. Which optimization algorithm is used to rewrite array references to pointer references?

2. What is the SSA-graph?

3. Explain the principles of how Tarjan’s algorithm to detect the strongly connected components of the SSA-graph.

4. Explain the principles of how a multiplication is replaced with repeated add.

5. What is the purpose of linear function test replacement?

6. What does control dependence mean and how is it computed?

7. Explain the SSA-based dead code elimination algorithm, including simplify.