Course Outline

1. Week 1
   - Variables
   - Input and output
   - Operators
   - If condition and switch
   - Switch case
2. Week2
   a. Loops
   b. Nested Loops
   c. Ascii code
3. Week 3
   a. Array 1D
   b. Array 2D
   c. String
4. Week 4
   a. Function
   b. Struct
5. Week 5
   a. Exam
6. Week 6
   a. Encapsulation
   b. Composition
7. Week 7
   a. Inheritance
   b. Abstraction
   c. Introduction for pointers
8. Week8
   a. Polymorphism
   b. Template
   c. Exception
9. Exam
10. Week 9
    a. linkedList
    b. ArrayList
11. Week 10
    a. Stack
    b. Queue
    c. Recursion
    d. Binary search tree
12. Week 11
    a. Binary search tree
    b. DFS

       c. BFS
       d. Hash table
       e. Introduction about graph

13. Week 12
       a. Java
       b. Project

14. Week 13
       a. Sorting algorithms
       b. Dynamic programming algorithm

15. Week 14
       a. Solid principles
       b. Design pattern
       c. Unit testing

16. Week 15
       a. Agile
       b. DataBase