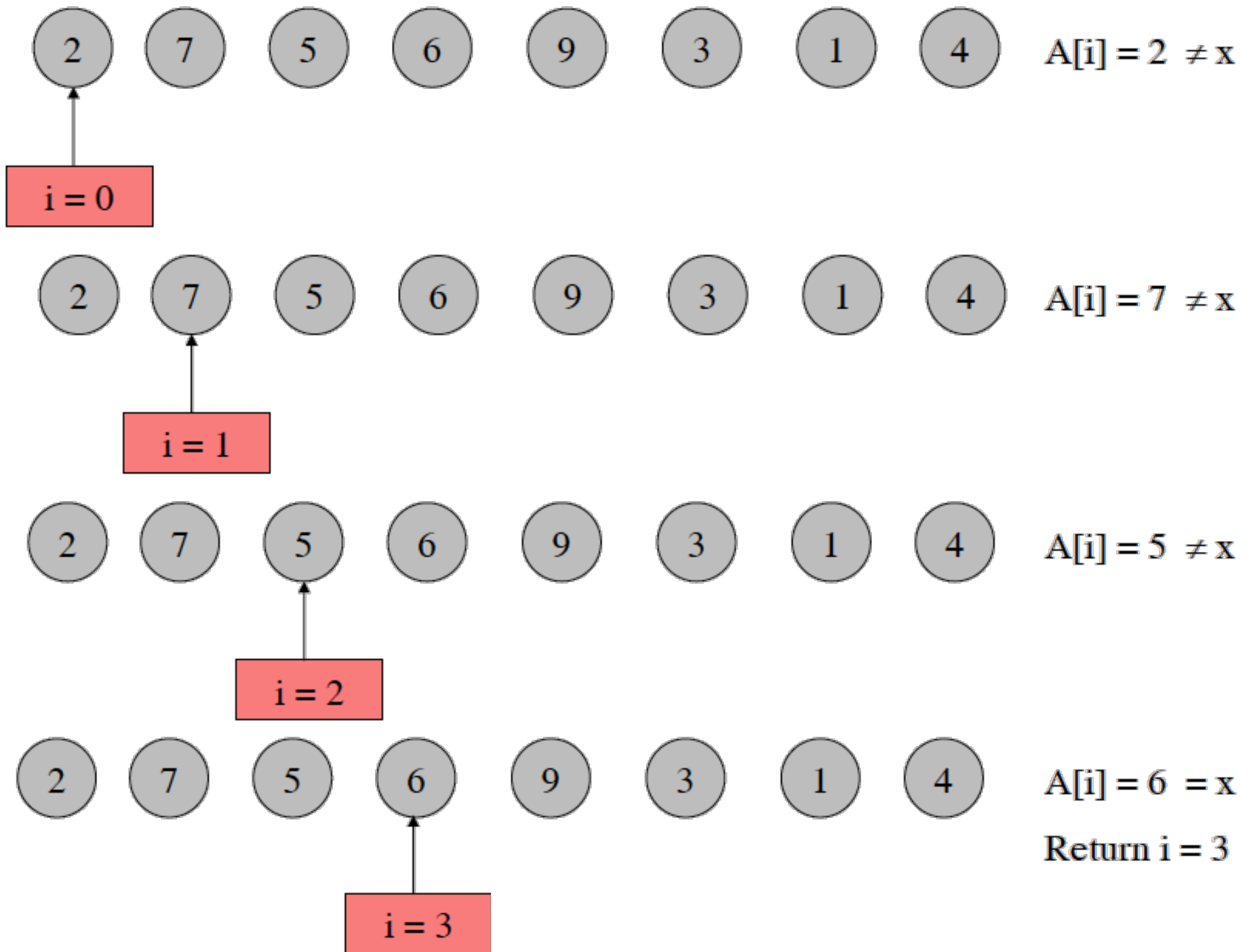


# CSCI-1411 FUNDAMENTALS OF COMPUTING LAB

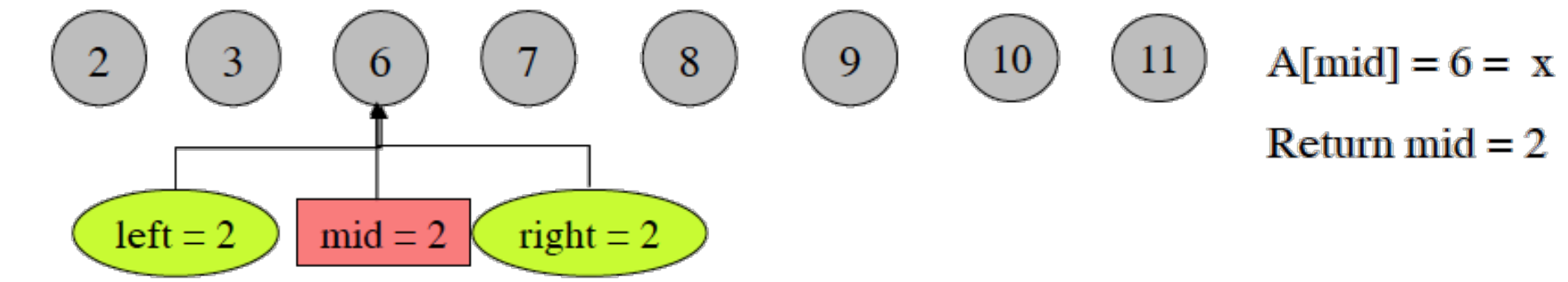
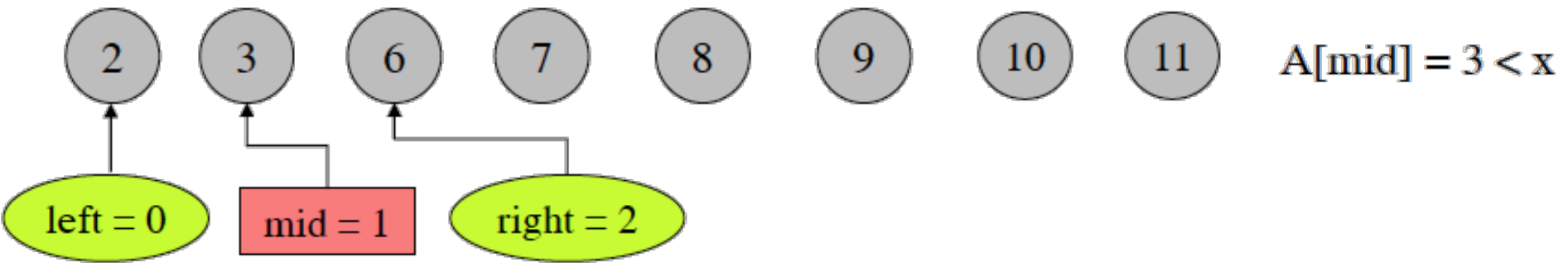
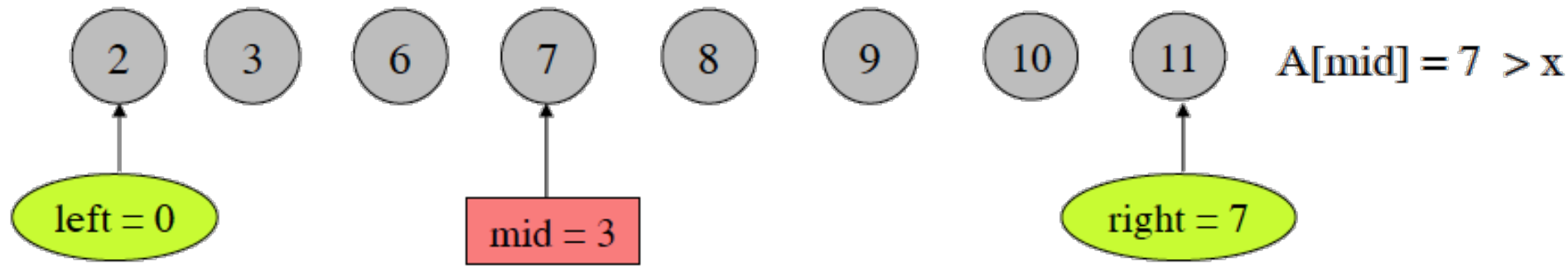
1

# Linear Search



2

# Binary Search



3

# Bubble Sort

19	-4	91	0	-17
----	----	----	---	-----

Element 0      Element 1      Element 2      Element 3      Element 4



-4	19	91	0	-17
----	----	----	---	-----

Element 0      Element 1      Element 2      Element 3      Element 4



-4	19	0	91	-17
----	----	---	----	-----

Element 0      Element 1      Element 2      Element 3      Element 4



-4	19	0	91	-17
----	----	---	----	-----

Element 0      Element 1      Element 2      Element 3      Element 4



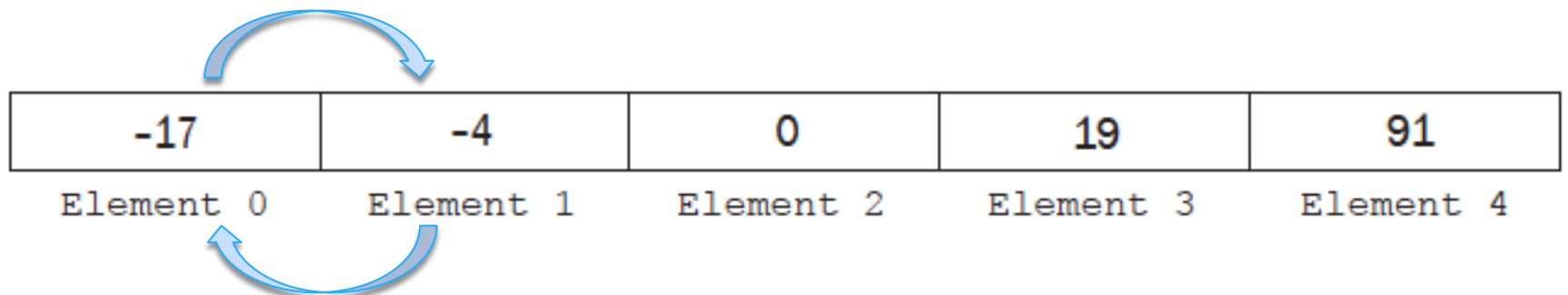
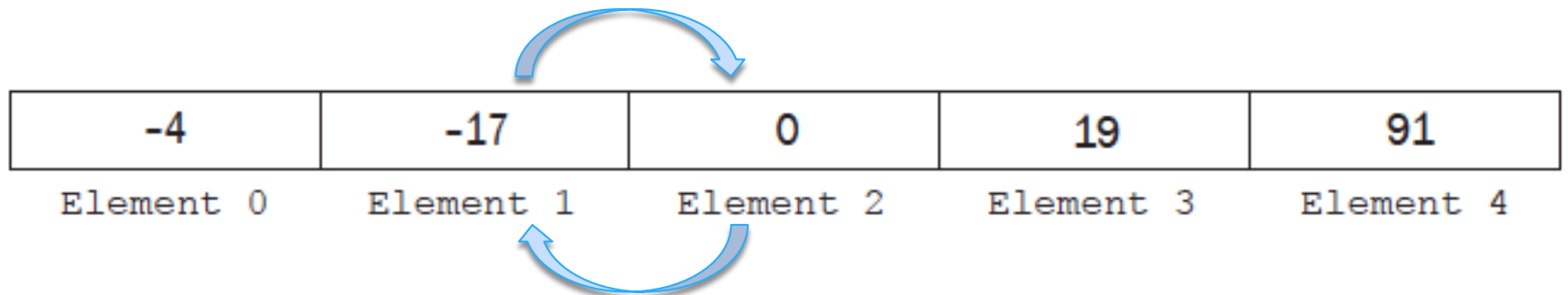
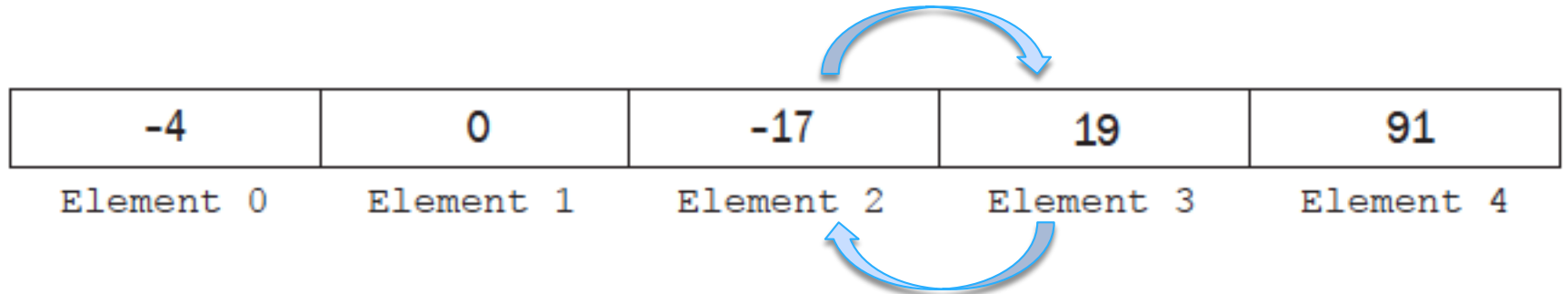
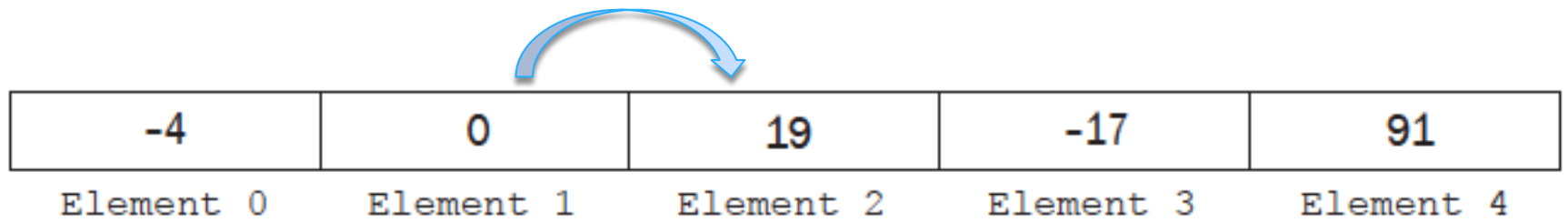
-4	19	0	-17	91
----	----	---	-----	----

Element 0      Element 1      Element 2      Element 3      Element 4



-4	19	0	-17	91
----	----	---	-----	----





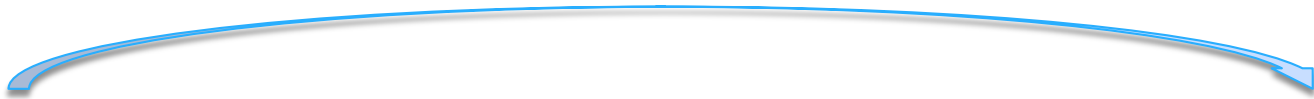


4

# Selection Sort

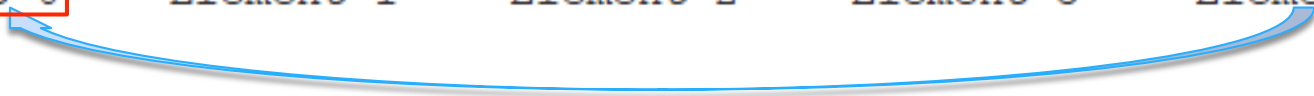
19	-4	91	0	-17
----	----	----	---	-----

Element 0      Element 1      Element 2      Element 3      Element 4



-17	-4	91	0	19
-----	----	----	---	----

Element 0      Element 1      Element 2      Element 3      Element 4



-17	-4	0	91	19
-----	----	---	----	----

Element 0      Element 1      Element 2      Element 3      Element 4



-17	-4	0	19	91
-----	----	---	----	----

Element 0      Element 1      Element 2      Element 3      Element 4



# Lab 8: Searching and Sorting Arrays

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- Overview:
  - ▣ Lab 8 Components
    - Lab Sections (8.1, 8.2, 8.3, 8.4)
    - Do Section 8.4 (including the optional part 4)

# Lab 8: Searching and Sorting Arrays

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- 8.1 Working with the Linear Search
  - (linear\_search.cpp)
  - Ensure that Exercise 2 is complete
  - Answer questions asked in exercise 1 & 2
- 8.2 Working with the Binary Search
  - (binary\_search.cpp)
  - Answer questions asked in exercise 1 & 2
- 8.3 Working with Sorts
  - Select ONE sorting algorithm
  - (bubble\_sort.cpp) (OR) (selection\_sort.cpp)
  - Answer questions asked in exercise 2
- 8.4 You do NOT get to choose your adventure
  - Complete the (non-Optional) Exercise iv)
  - Name the source file: main.cpp

# Lab 8: Searching and Sorting Arrays

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- Submission File Checklist
  - Submit all files on Canvas (One at a time or all of them in a single zip file). Be sure to include all source files and documents.
  
  - 8.1 linear\_search.cpp
  - 8.2 binary\_search.cpp
  - 8.3 bubble\_sort.cpp (OR) selection\_sort.cpp (Not both)
  - 8.4 main.cpp (Implement **non-optional** part iv)