7612 Asn 1 - Design

The labyrinth has nothing on the stack
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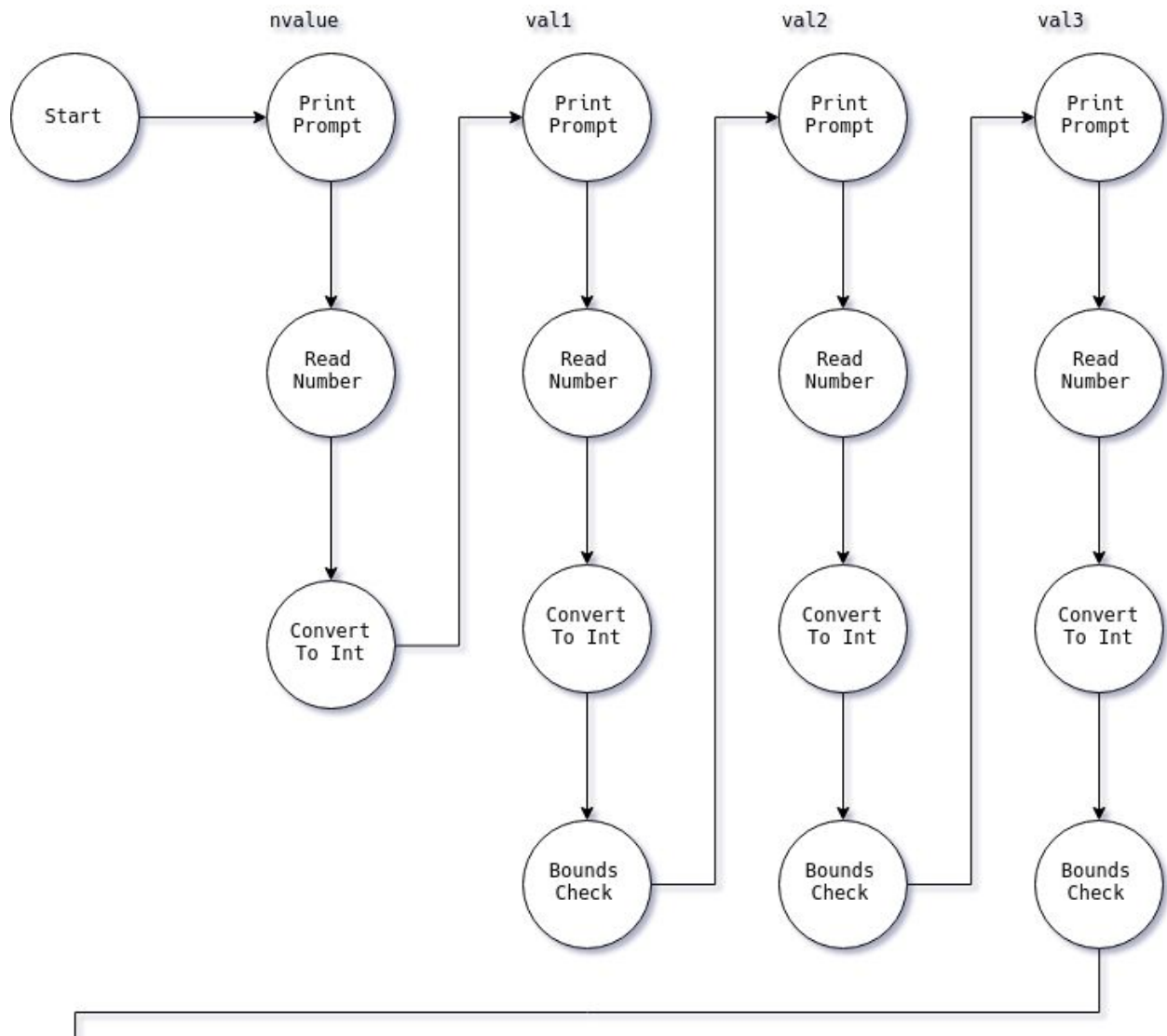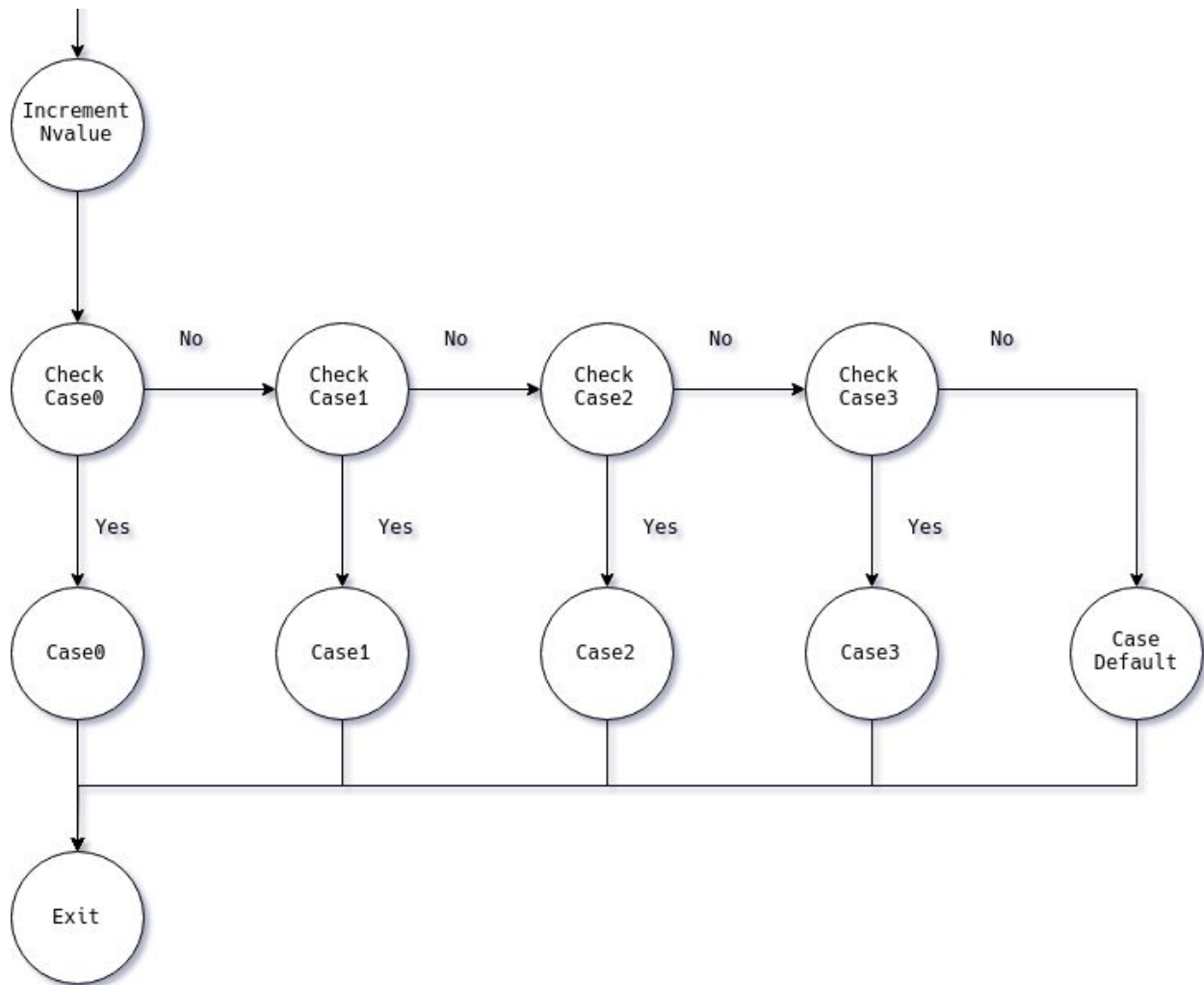
FSM

nvalue   val1   val2   val3

Start → Print Prompt → Read Number → Convert To Int

Print Prompt → Read Number → Convert To Int → Bounds Check

Print Prompt → Read Number → Convert To Int → Bounds Check

Print Prompt → Read Number → Convert To Int → Bounds Check

Pseudocode

Start
Print the intro prompt
Read in a number
Convert the string to an int
Store the int in nvalue
Print the val1 prompt
Read in a number
Convert the string to an int
Ensure the bounds are correct
Print the val2 prompt
Read in a number
Convert the string to an int

Ensure the bounds are correct
Print the val3 prompt
Read in a number
Convert the string to an int
Ensure the bounds are correct
Increment the nvalue to mimic the first part of the switch
Check if this is case 0
      If it is goto **case0**
Check if this is case 1
      If it is goto **case1**
Check if this is case 2
      If it is goto **case2**
Check if this is case 3
      If it is goto **case3**
It must be default
      Goto **case default**

Case0
Print case0
Multiply val1 and val2
Goto **Exit**

Case1
Print case1
Multiply val2 and val3
Goto **Exit**

Case2
Print case2
Subtract val3 and val1
Goto **Exit**

Case3
Print case3
Subtract val1 and val3
Goto **Exit**

Case Default
Print default case
Goto **Exit**

Exit