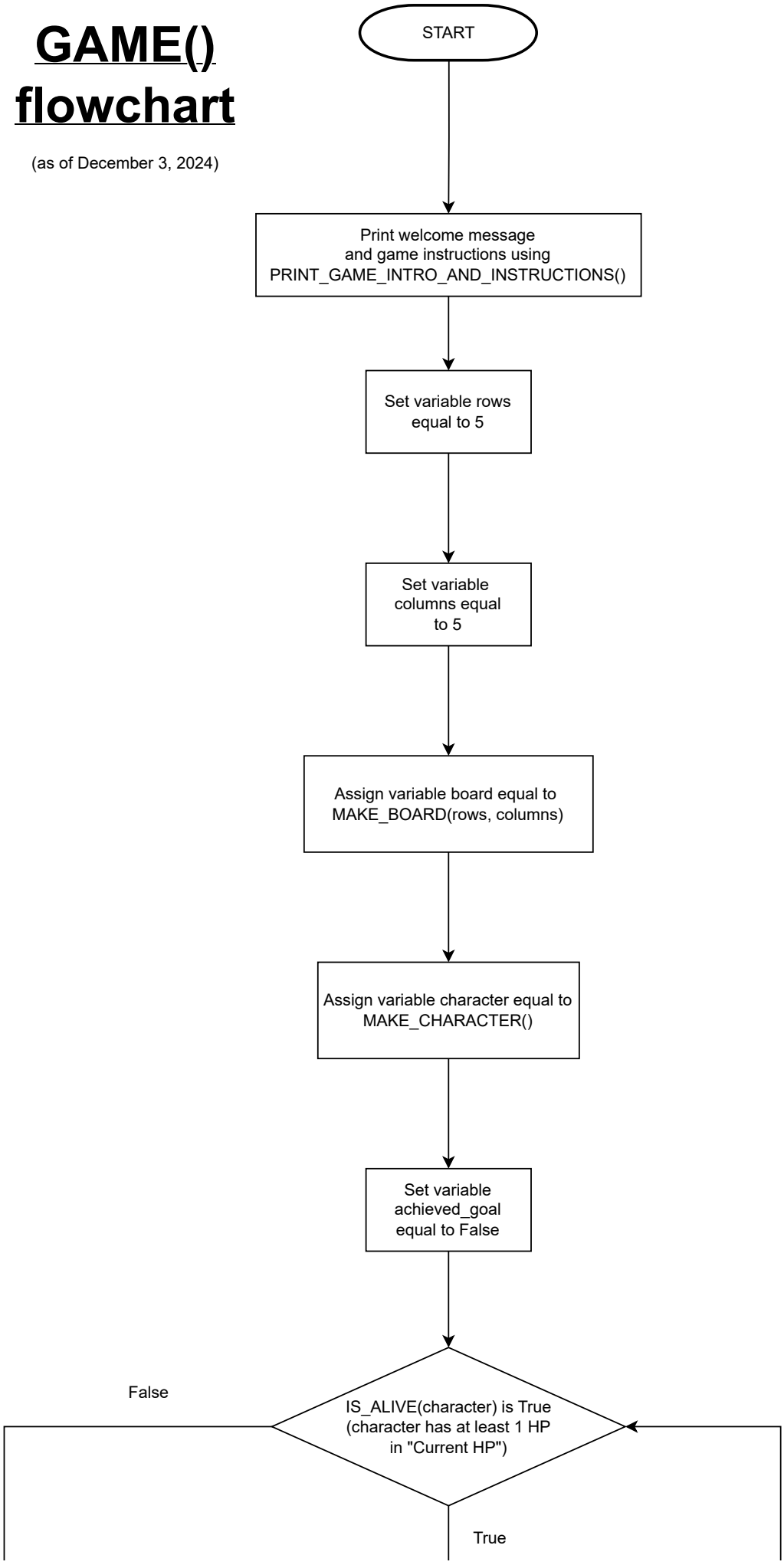
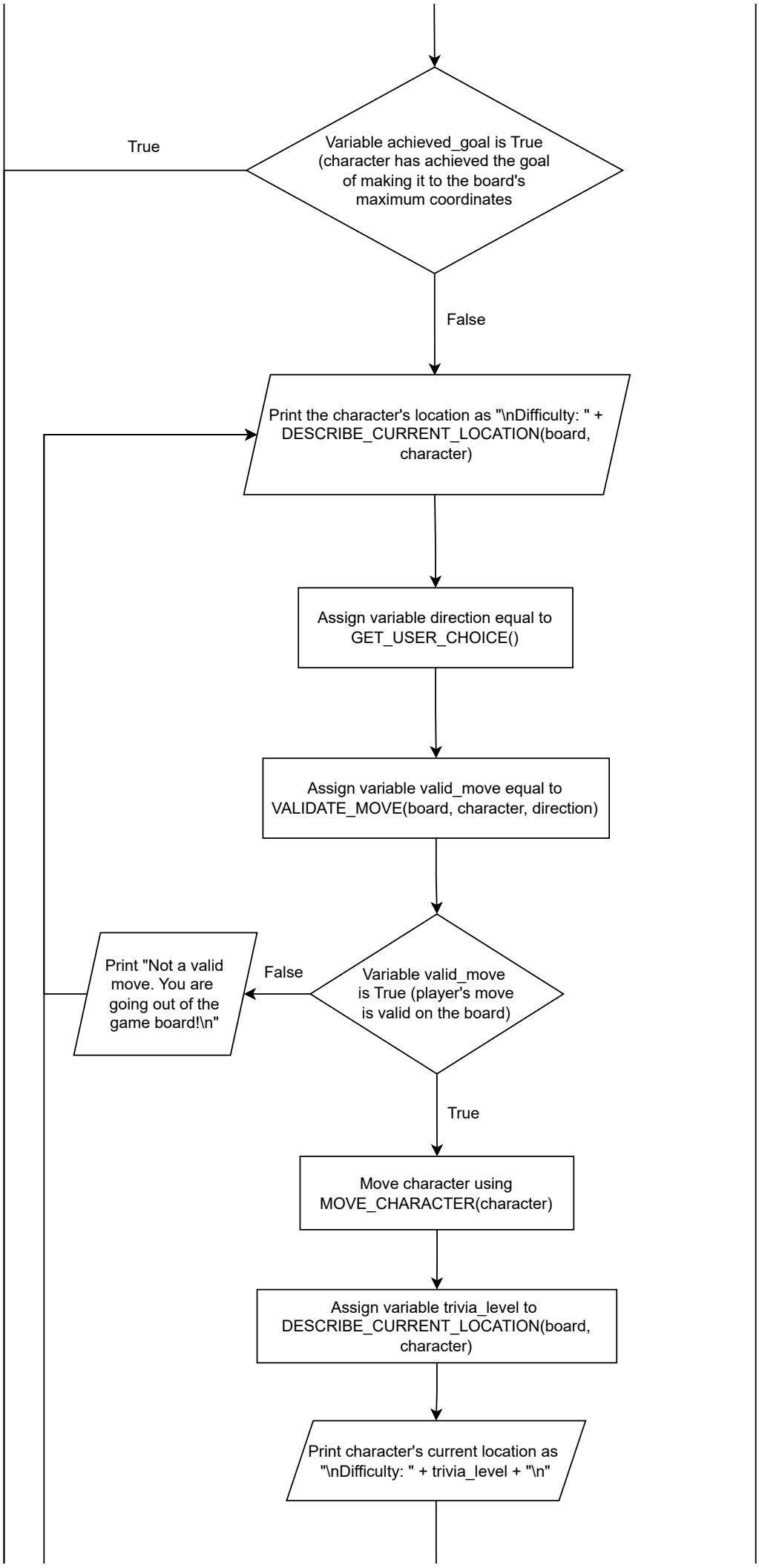
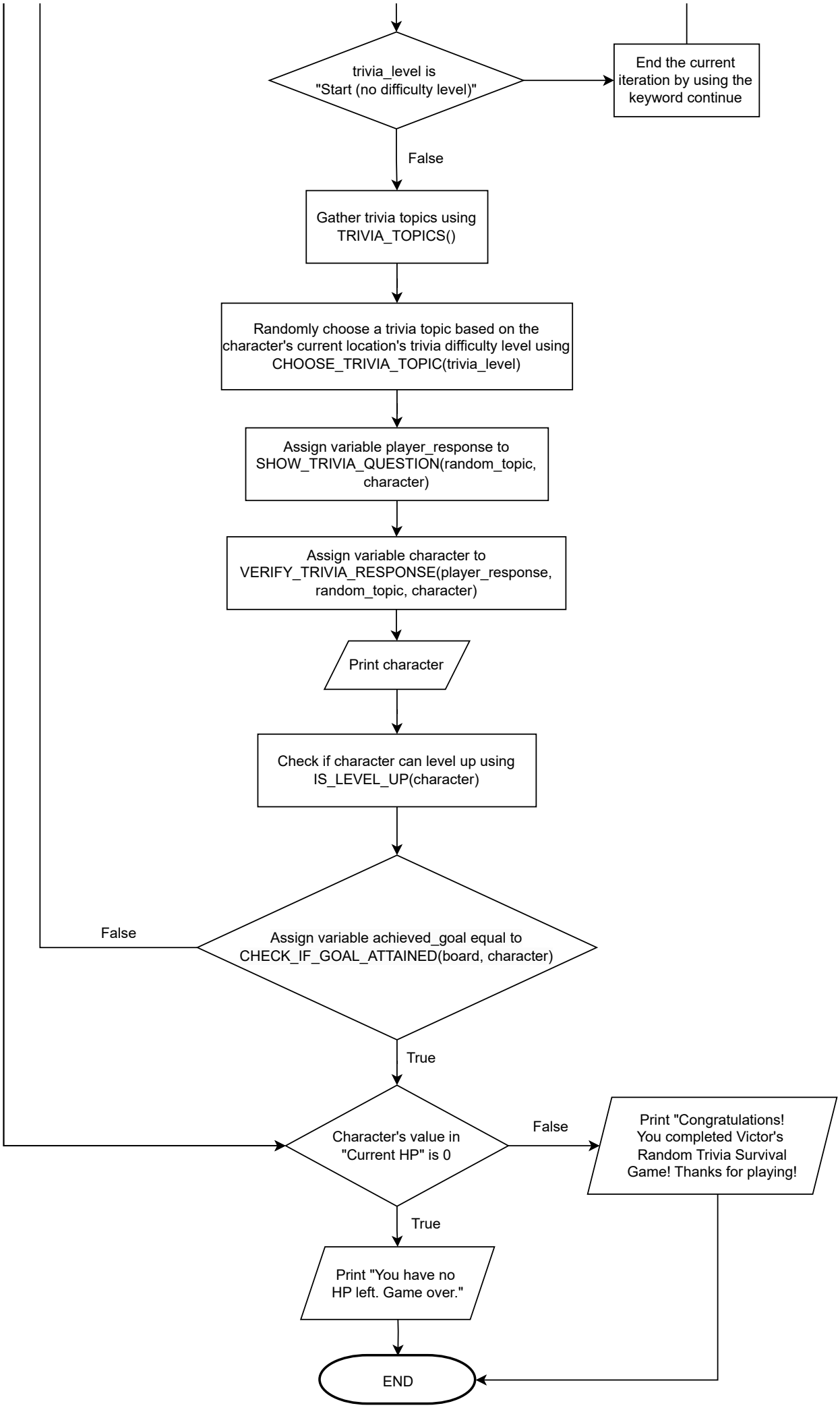
GAME() flowchart

(as of December 3, 2024)

Victor Lum
A01418439




Variable achieved_goal is True (character has achieved the goal of making it to the board's maximum coordinates
True
False
Print the character's location as "\nDifficulty: " + DESCRIBE_CURRENT_LOCATION(board, character)
Assign variable direction equal to GET_USER_CHOICE()
Assign variable valid_move equal to VALIDATE_MOVE(board, character, direction)
Variable valid_move is True (player's move is valid on the board)
False
Print "Not a valid move. You are going out of the game board!\n"
True
Move character using MOVE_CHARACTER(character)
Assign variable trivia_level to DESCRIBE_CURRENT_LOCATION(board, character)
Print character's current location as "\nDifficulty: " + trivia_level + "\n"


trivia_level is "Start (no difficulty level)"
End the current iteration by using the keyword continue
False
Gather trivia topics using TRIVIA_TOPICS()
Randomly choose a trivia topic based on the character's current location's trivia difficulty level using CHOOSE_TRIVIA_TOPIC(trivia_level)
Assign variable player_response to SHOW_TRIVIA_QUESTION(random_topic, character)
Assign variable character to VERIFY_TRIVIA_RESPONSE(player_response, random_topic, character)
Print character
Check if character can level up using IS_LEVEL_UP(character)
Assign variable achieved_goal equal to CHECK_IF_GOAL_ATTAINED(board, character)
False
True
Character's value in "Current HP" is 0
False
Print "Congratulations! You completed Victor's Random Trivia Survival Game! Thanks for playing!
True
Print "You have no HP left. Game over."
END

PRINT_GAME_INTRO_AND_INSTRUCTIONS() flowchart

(as of December 2, 2024)

Victor Lum
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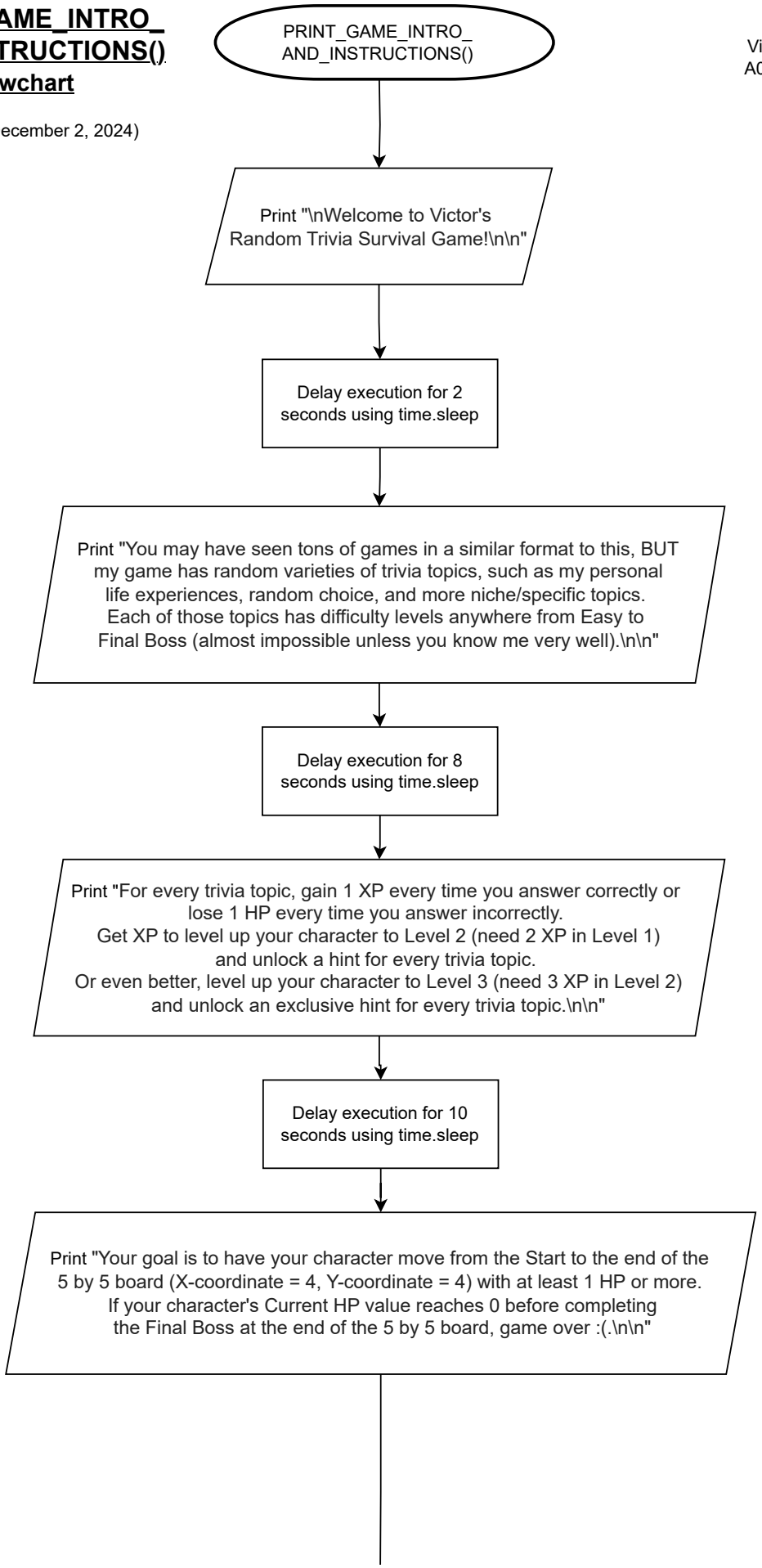

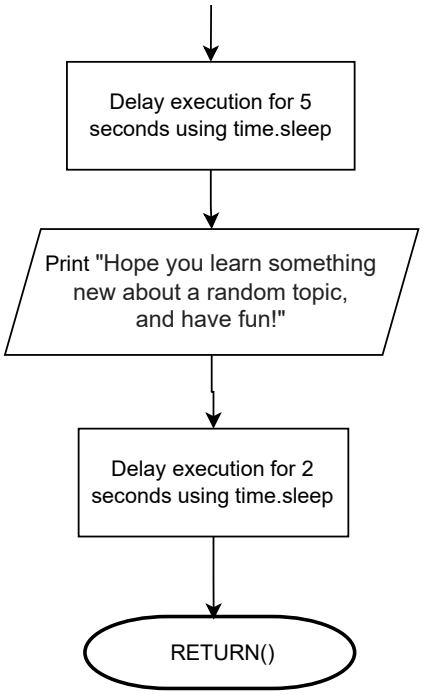
Delay execution for 5 seconds using time.sleep
Print "Hope you learn something new about a random topic, and have fun!"
Delay execution for 2 seconds using time.sleep
RETURN()

MAKE_START_AND_EASY_BOARD_COORDINATES(rows, columns)
flowchart

(as of December 2, 2024)

Victor Lum
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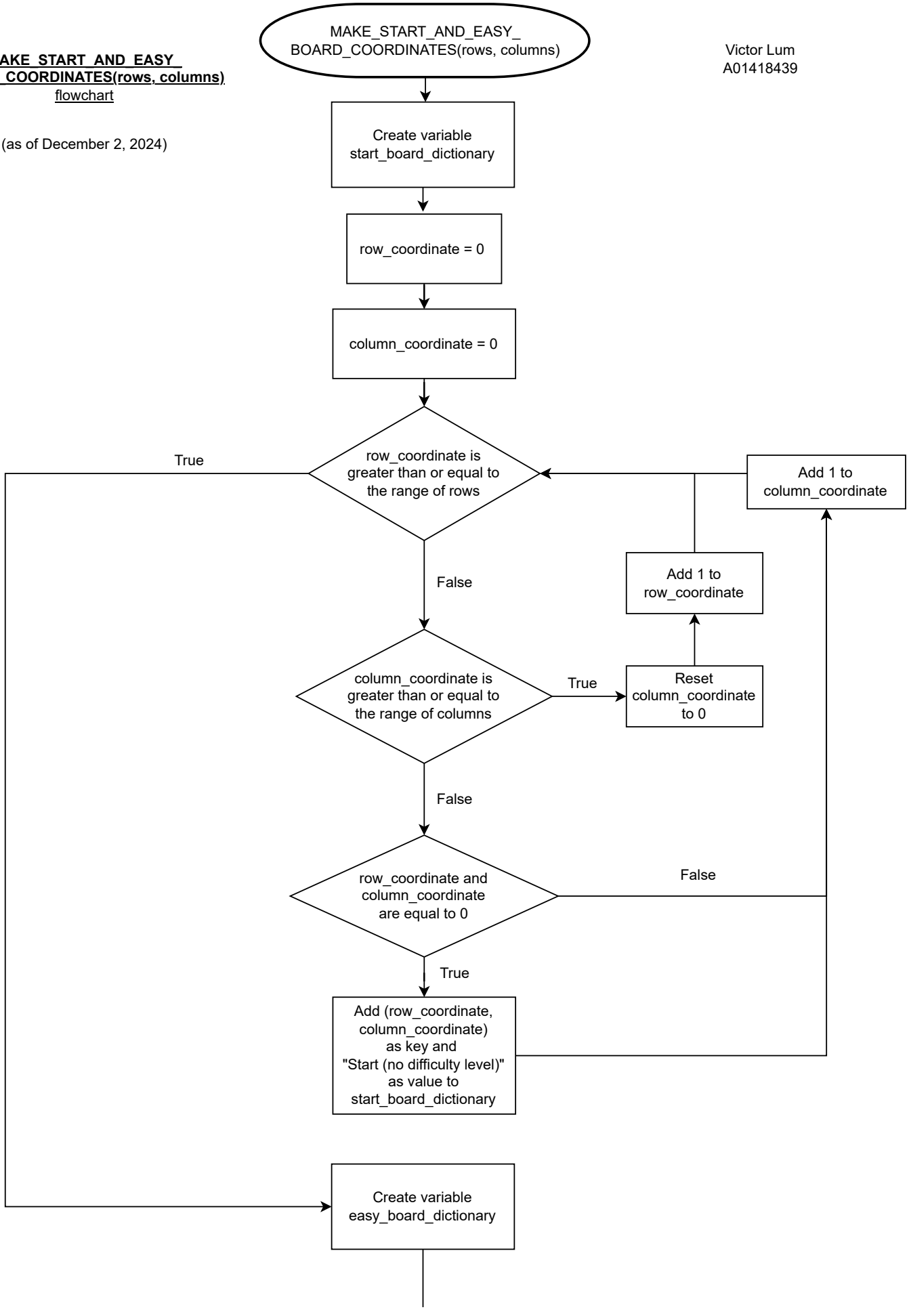

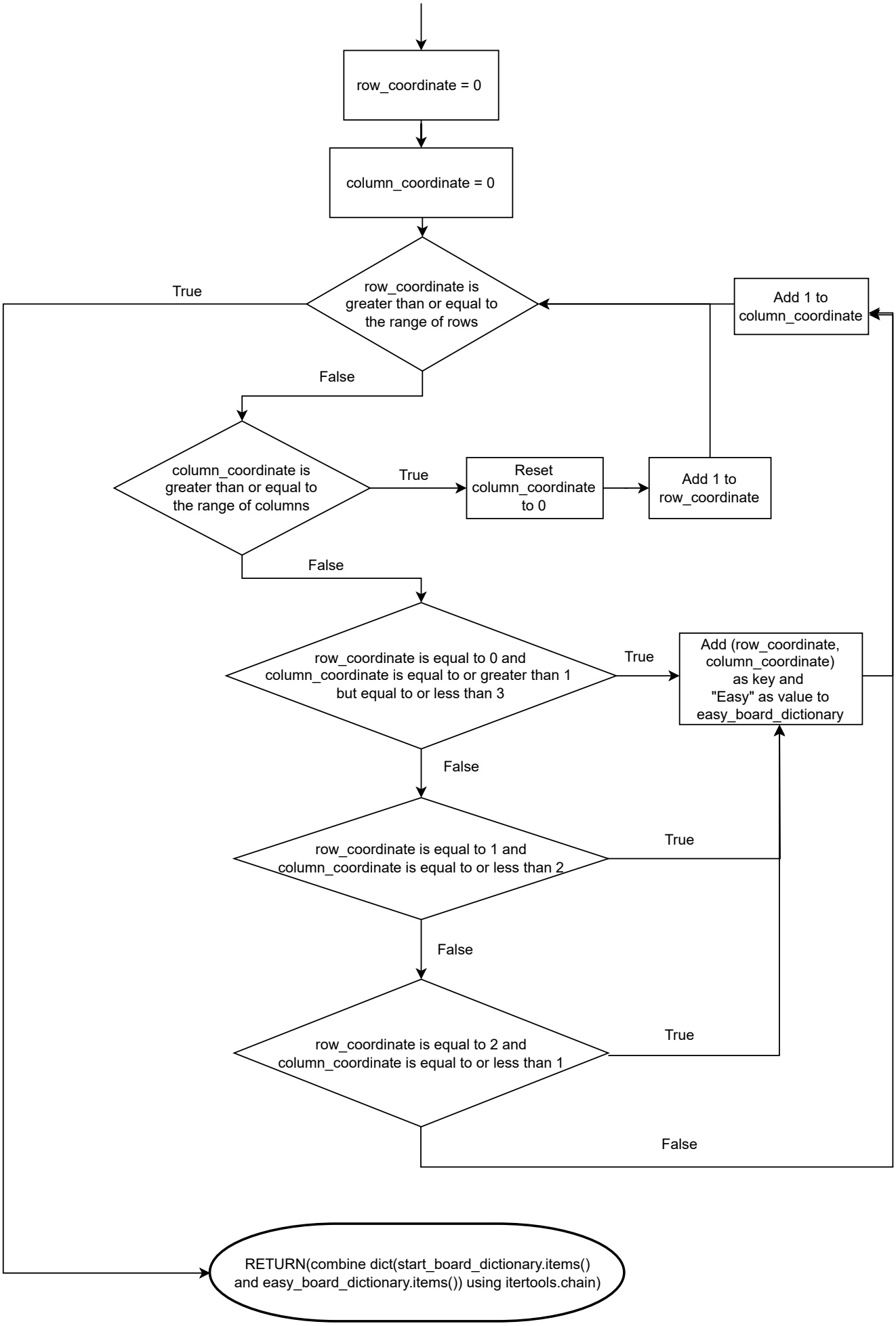
row_coordinate = 0
column_coordinate = 0
row_coordinate is greater than or equal to the range of rows
True
Add 1 to column_coordinate
False
column_coordinate is greater than or equal to the range of columns
True
Reset column_coordinate to 0
Add 1 to row_coordinate
False
row_coordinate is equal to 0 and column_coordinate is equal to or greater than 1 but equal to or less than 3
True
Add (row_coordinate, column_coordinate) as key and "Easy" as value to easy_board_dictionary
False
row_coordinate is equal to 1 and column_coordinate is equal to or less than 2
True
False
row_coordinate is equal to 2 and column_coordinate is equal to or less than 1
True
False
RETURN(combine dict(start_board_dictionary.items() and easy_board_dictionary.items()) using itertools.chain)

MAKE_MEDIUM_BOARD_COORDINATES
(rows, columns)
flowchart

(as of December 2, 2024)

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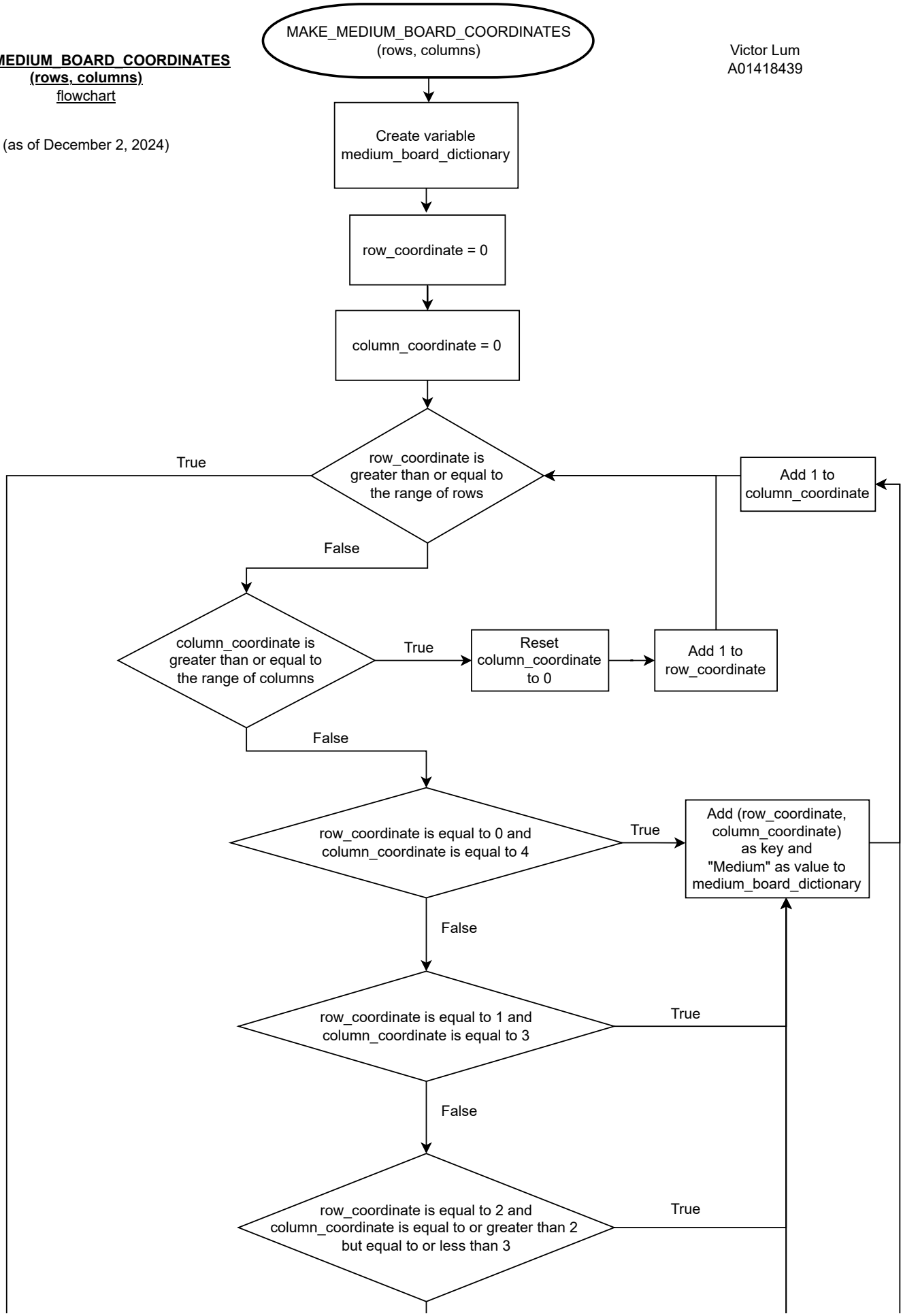

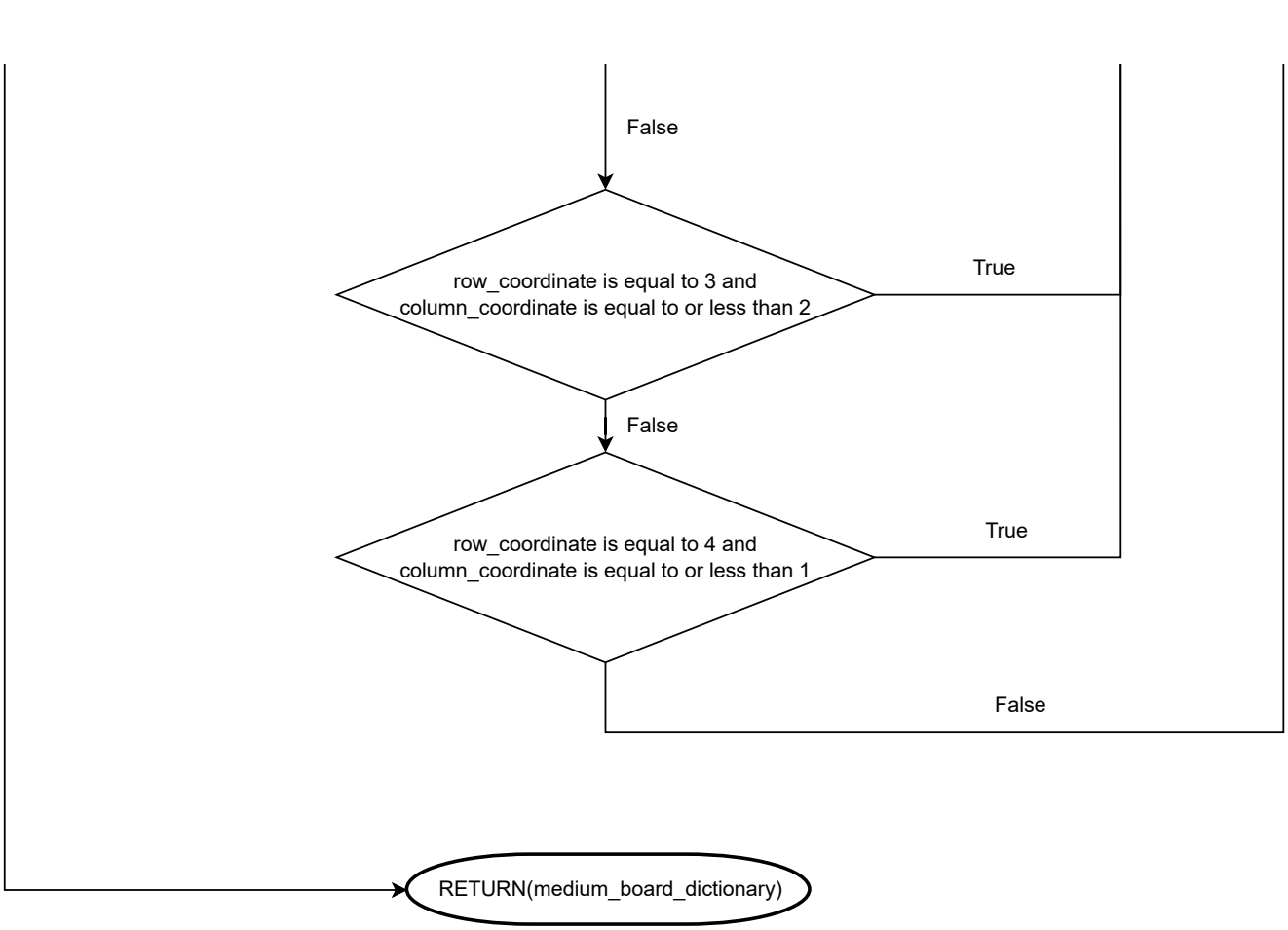
False
row_coordinate is equal to 3 and
column_coordinate is equal to or less than 2
True
False
row_coordinate is equal to 4 and
column_coordinate is equal to or less than 1
True
False
RETURN(medium_board_dictionary)

MAKE_HARD_BOARD_COORDINATES
(rows, columns)
flowchart

(as of December 2, 2024)

Victor Lum
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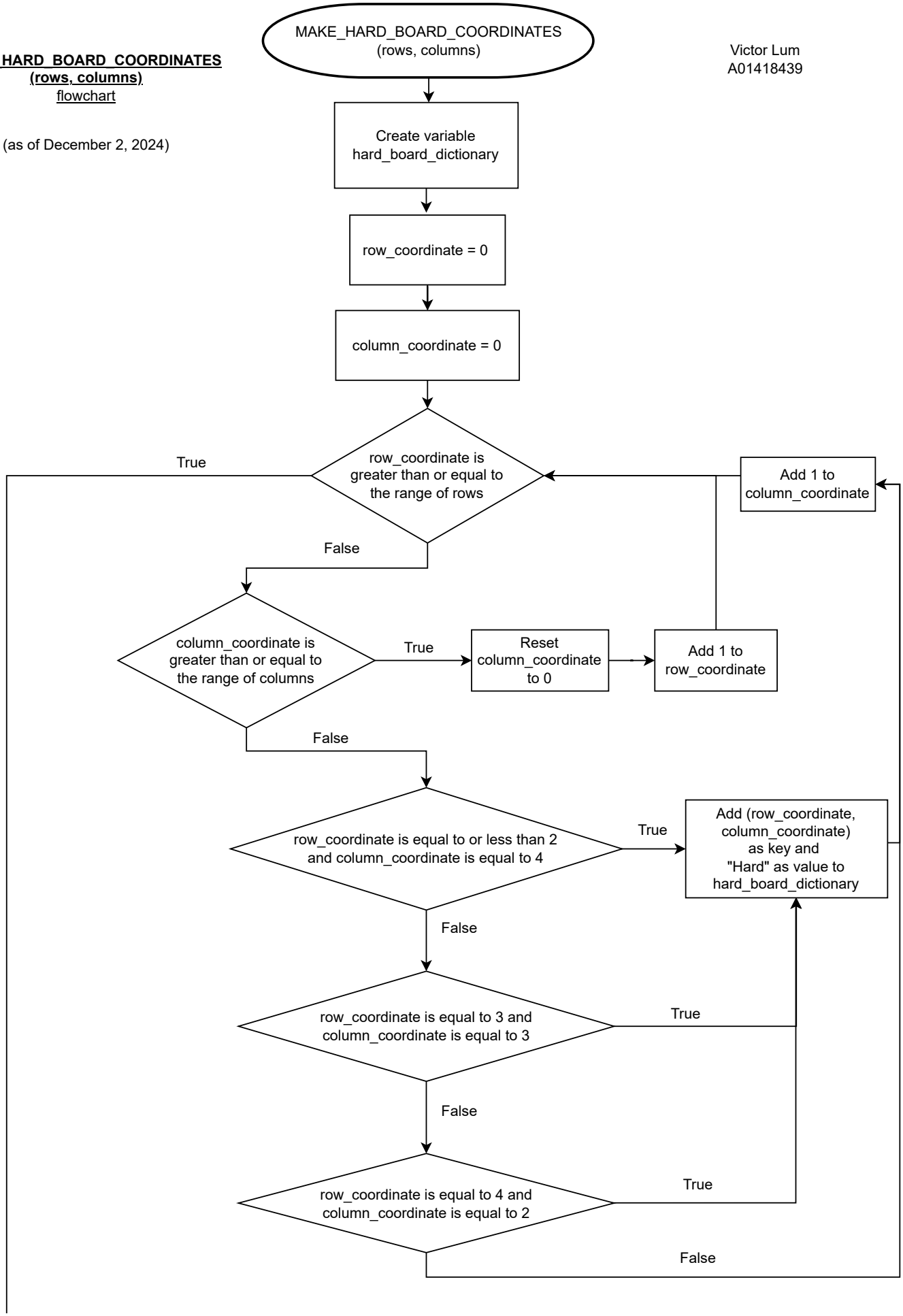

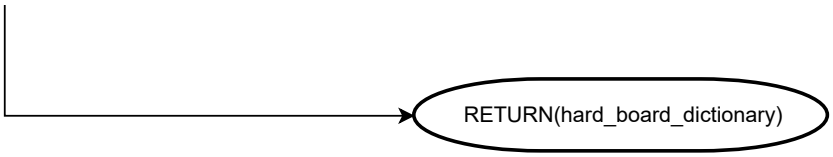
RETURN(hard_board_dictionary)

MAKE_VERY_HARD_BOARD_COORDINATES (rows, columns)
flowchart

(as of December 2, 2024)

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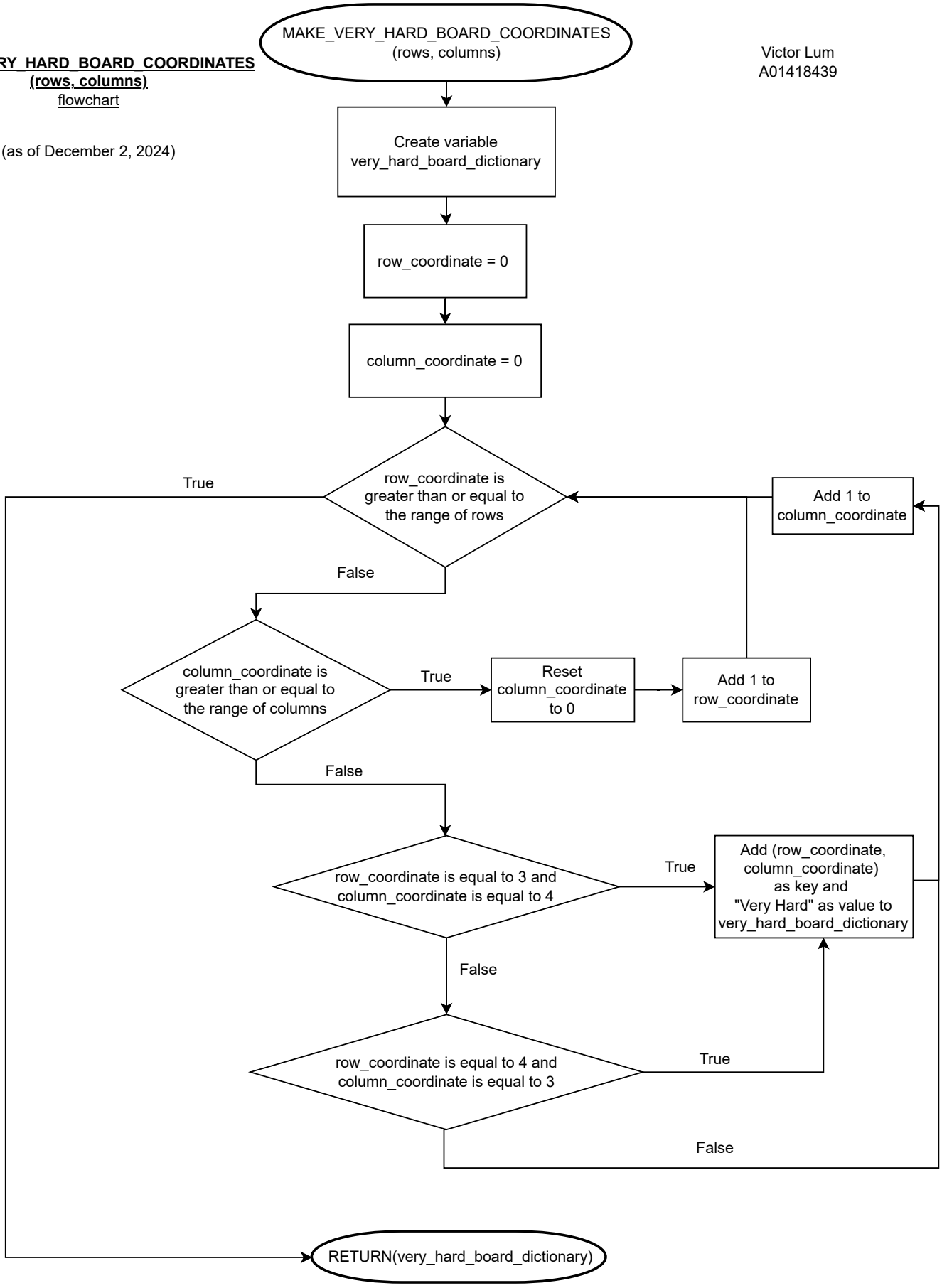

MAKE_FINAL_BOSS_BOARD_COORDINATE (rows, columns)
flowchart

(as of December 2, 2024)

Victor Lum
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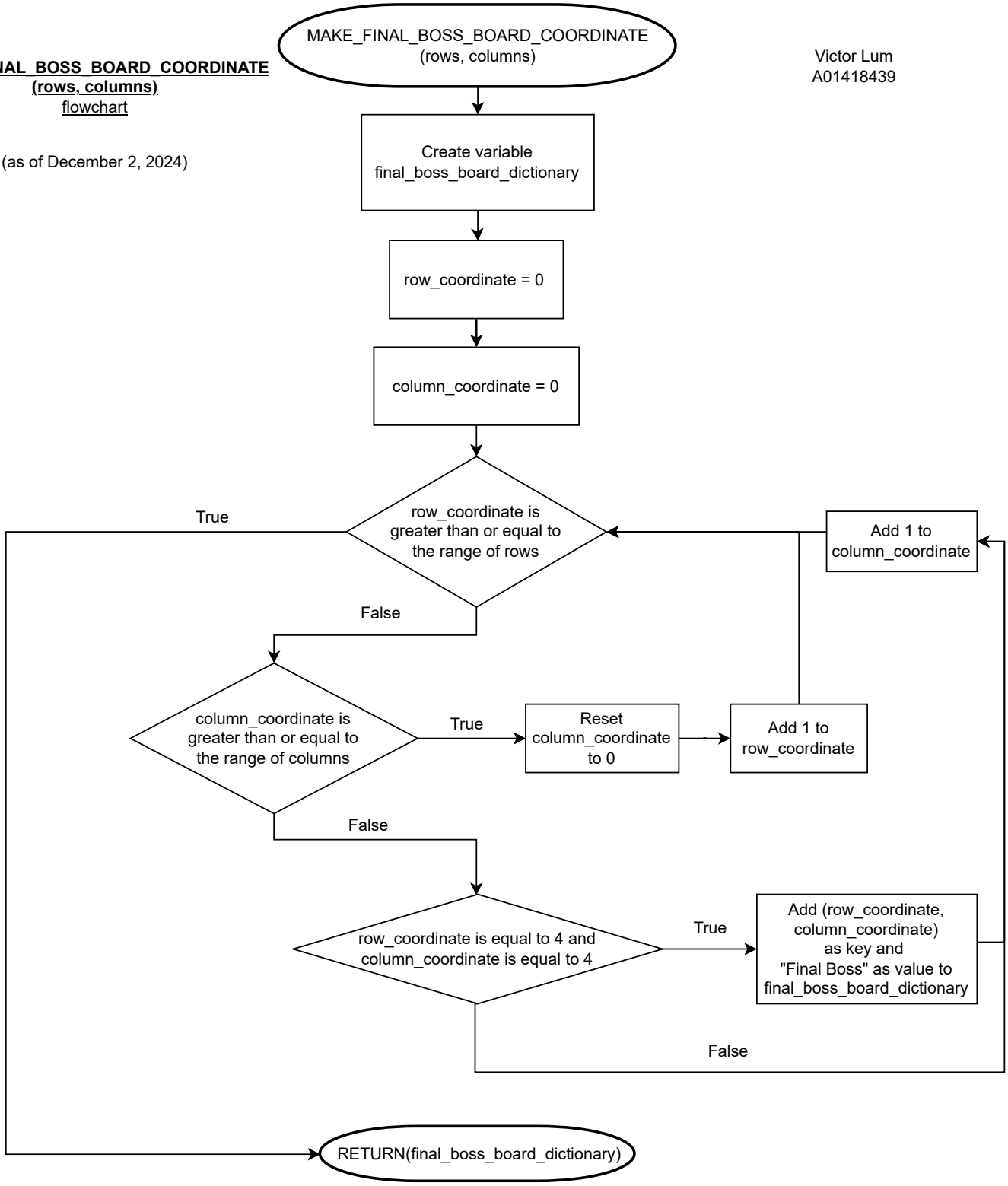

MAKE_BOARD(rows, columns)
flowchart

(as of December 2, 2024)

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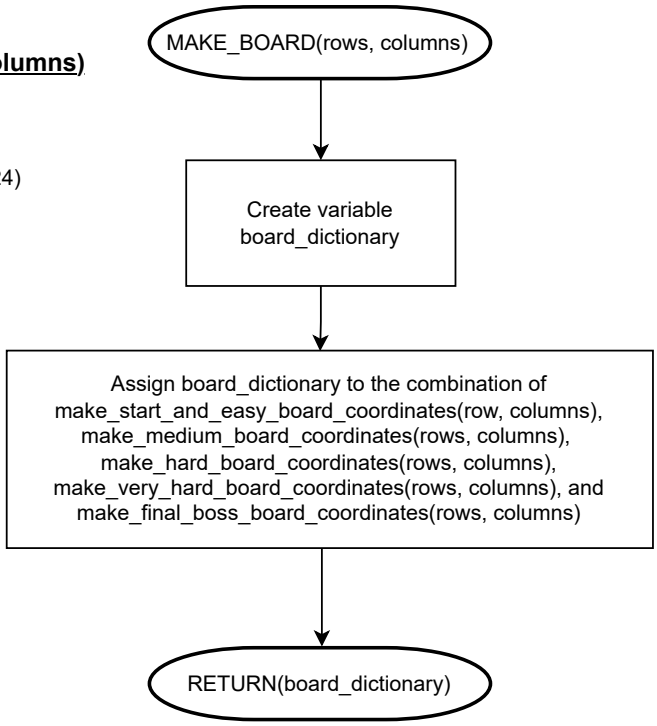

MAKE_CHARACTER() flowchart

(as of November 20, 2024)

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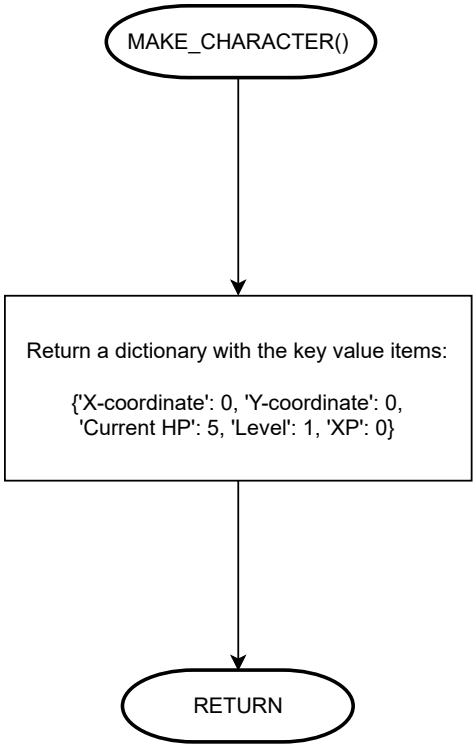
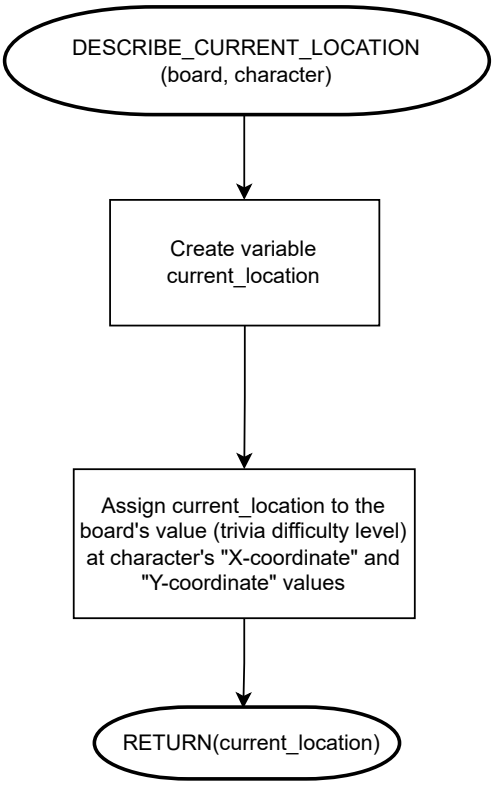


DESCRIBE_CURRENT_LOCATION (board, character) flowchart

(as of December 2, 2024)



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GET_USER_CHOICE() flowchart

(as of November 22, 2024)

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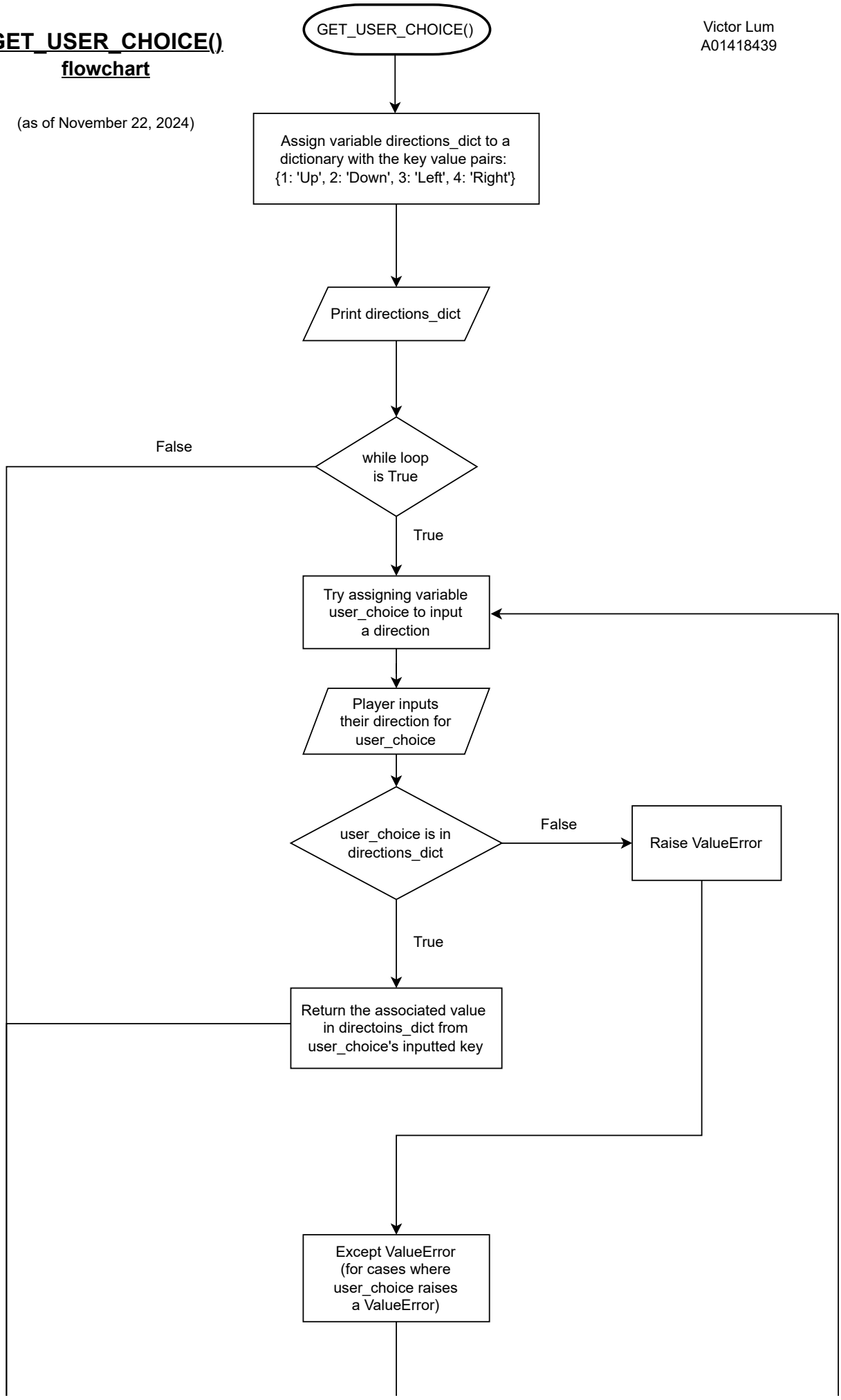
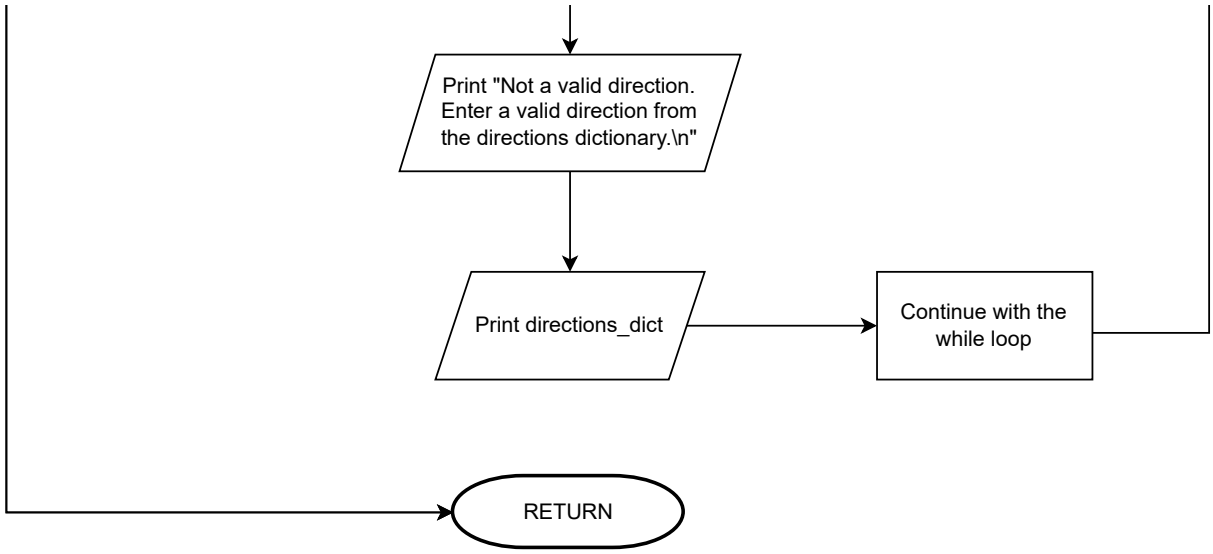
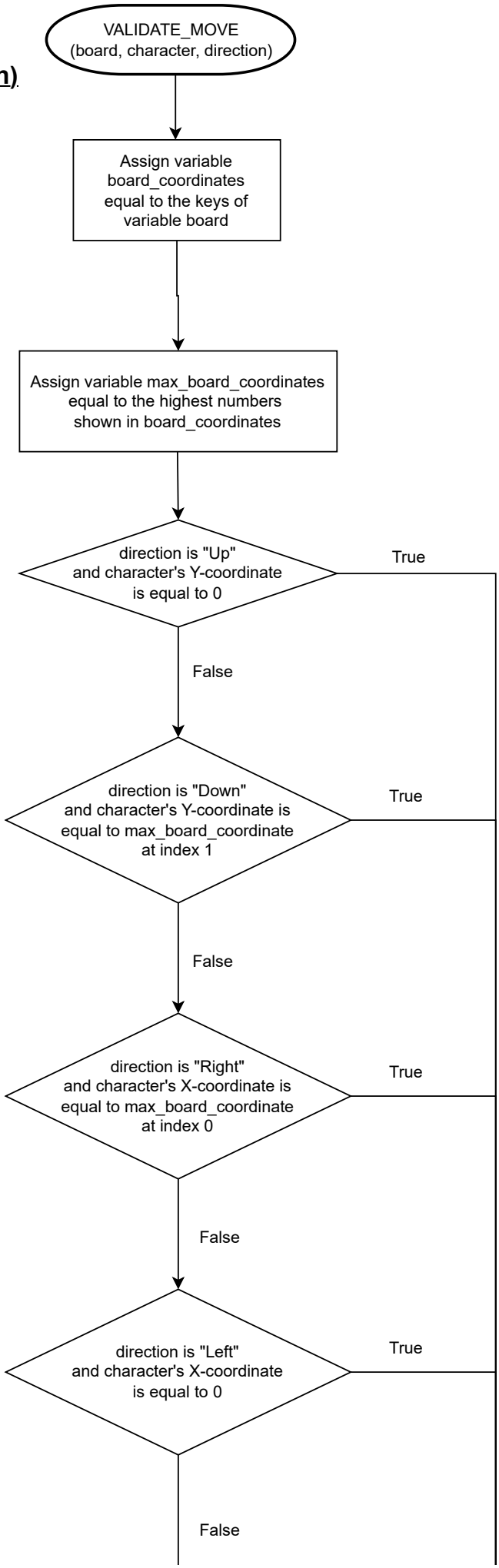


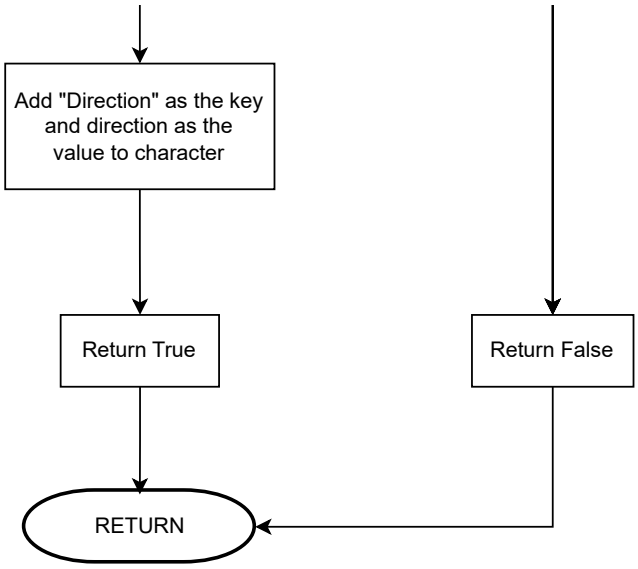

Print "Not a valid direction. Enter a valid direction from the directions dictionary.\n"
Print directions_dict
Continue with the while loop
RETURN

VALIDATE_MOVE (board, character, direction) flowchart

(as of November 22, 2024)

Victor Lum
A01418439

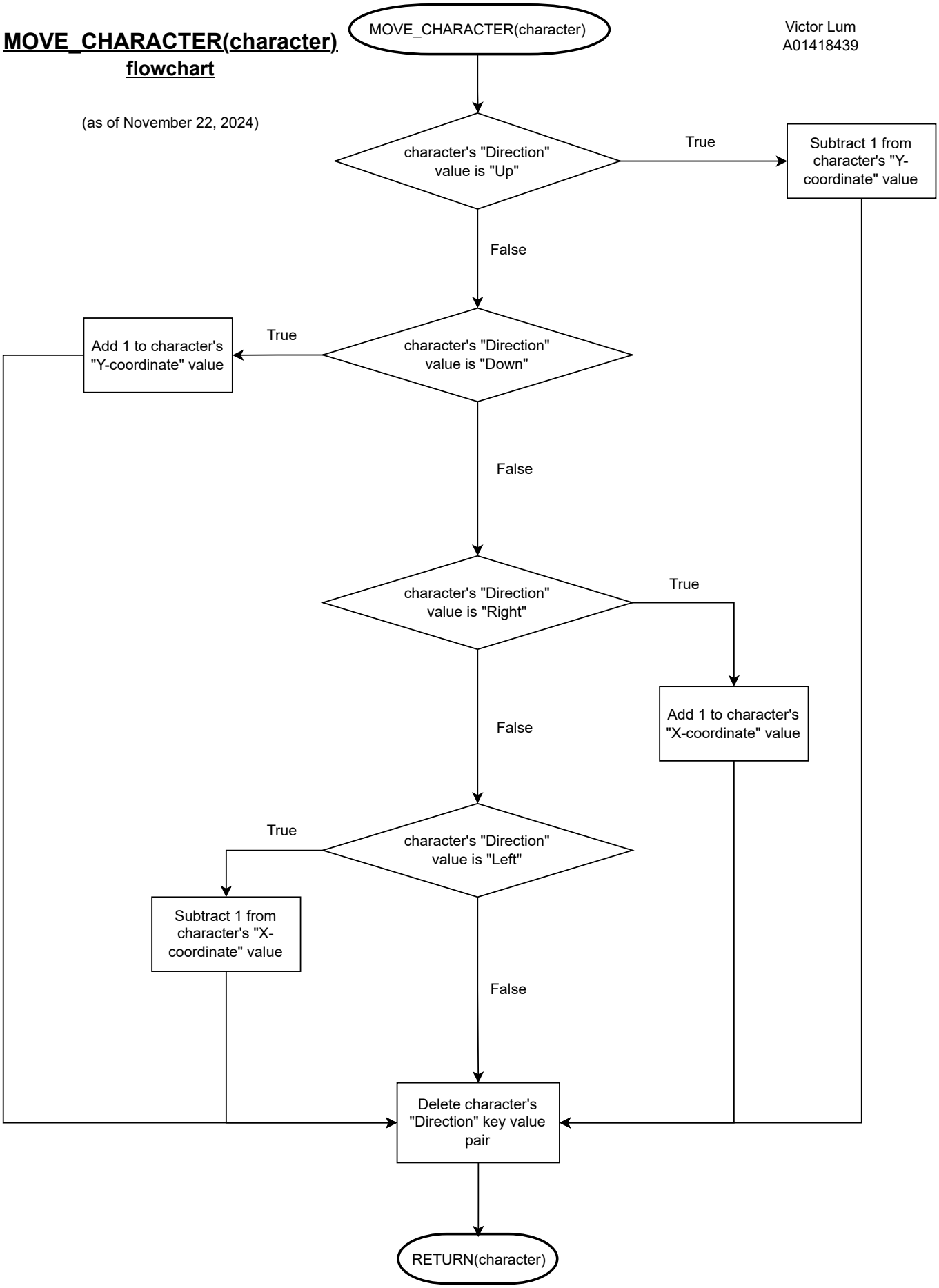



Add "Direction" as the key and direction as the value to character
Return True
Return False
RETURN

MOVE_CHARACTER(character) flowchart

(as of November 22, 2024)

Victor Lum
A01418439

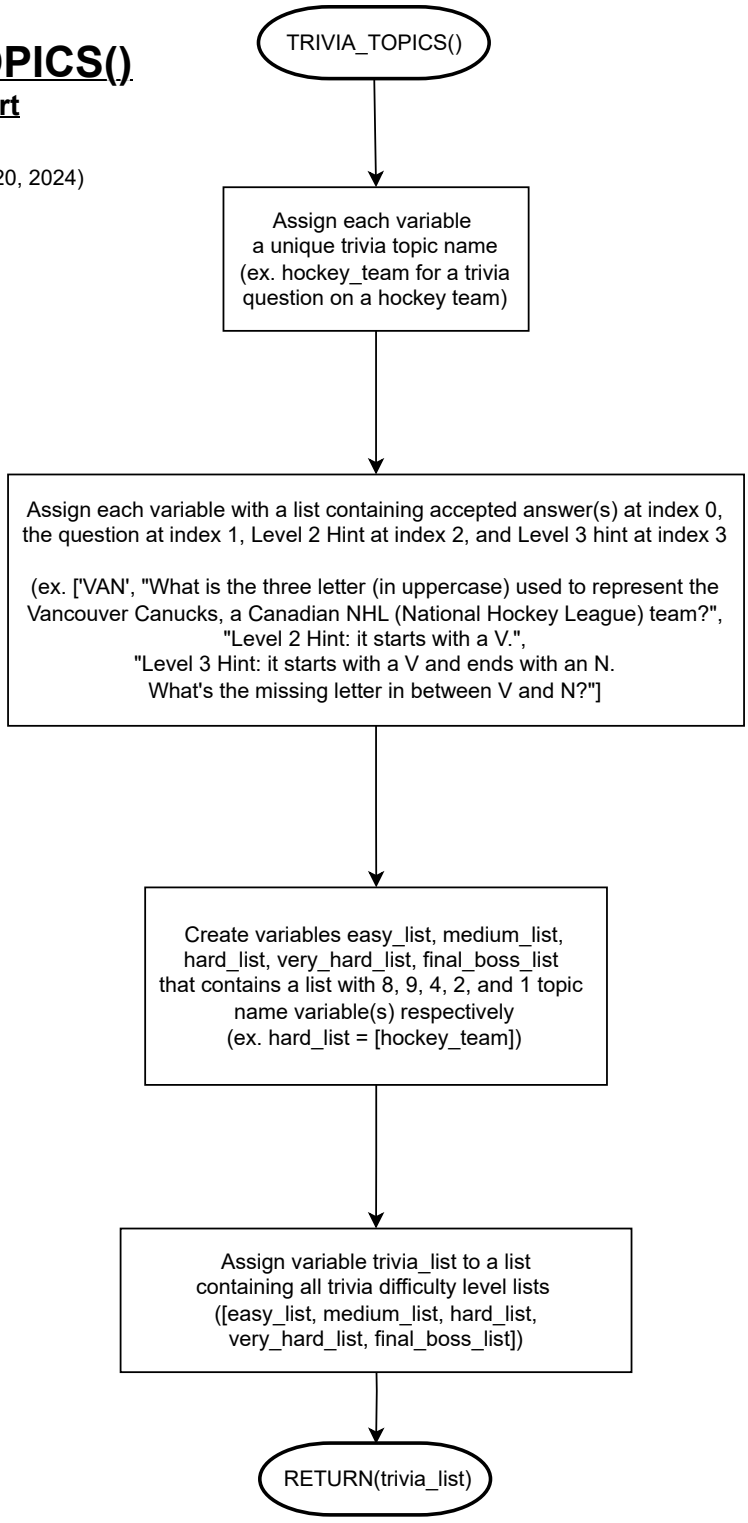


TRIVIA_TOPICS()

flowchart

(as of November 20, 2024)

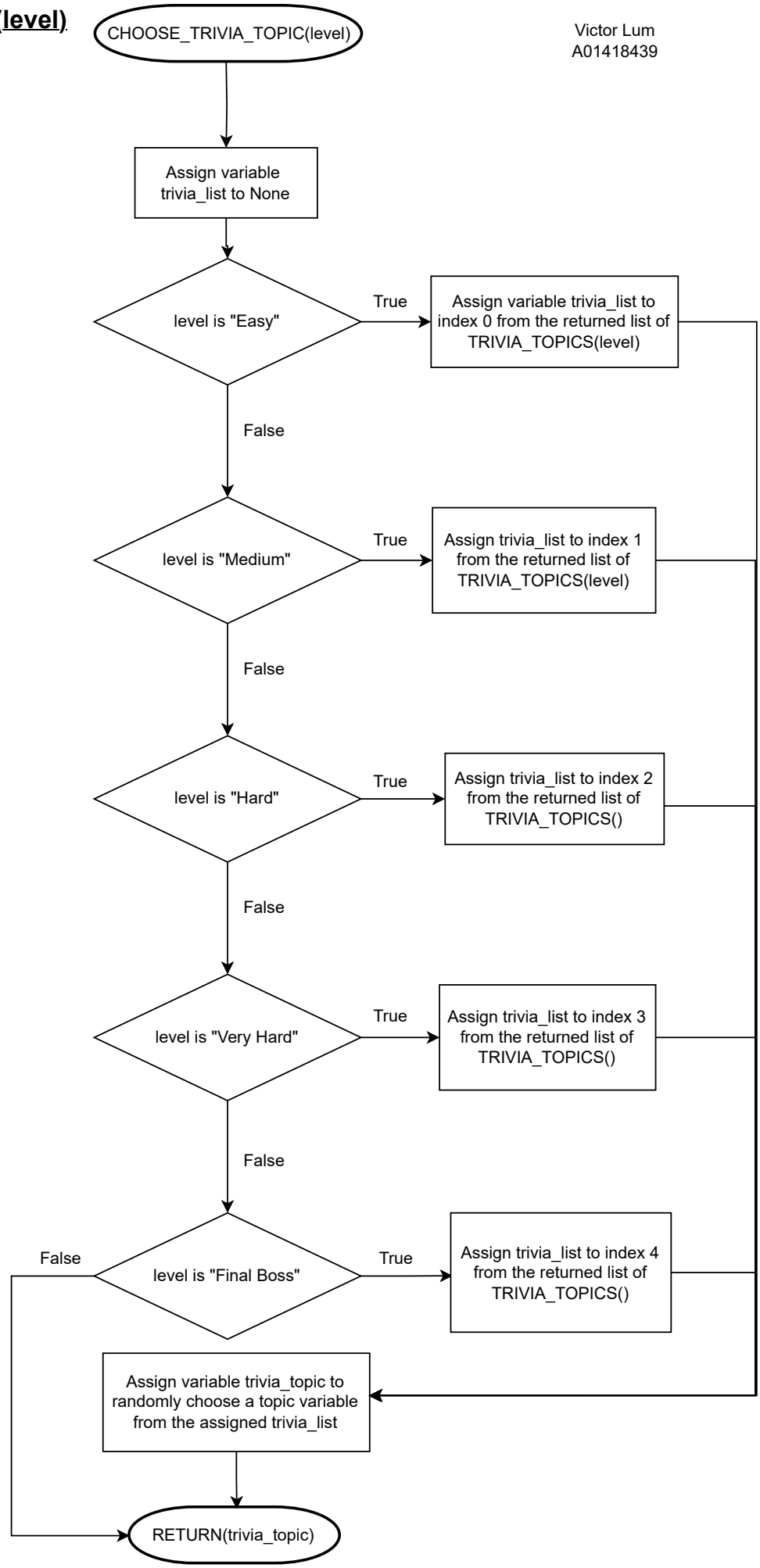
Victor Lum
A01418439



CHOOSE_TRIVIA_TOPIC(level) flowchart

(as of December 2, 2024)

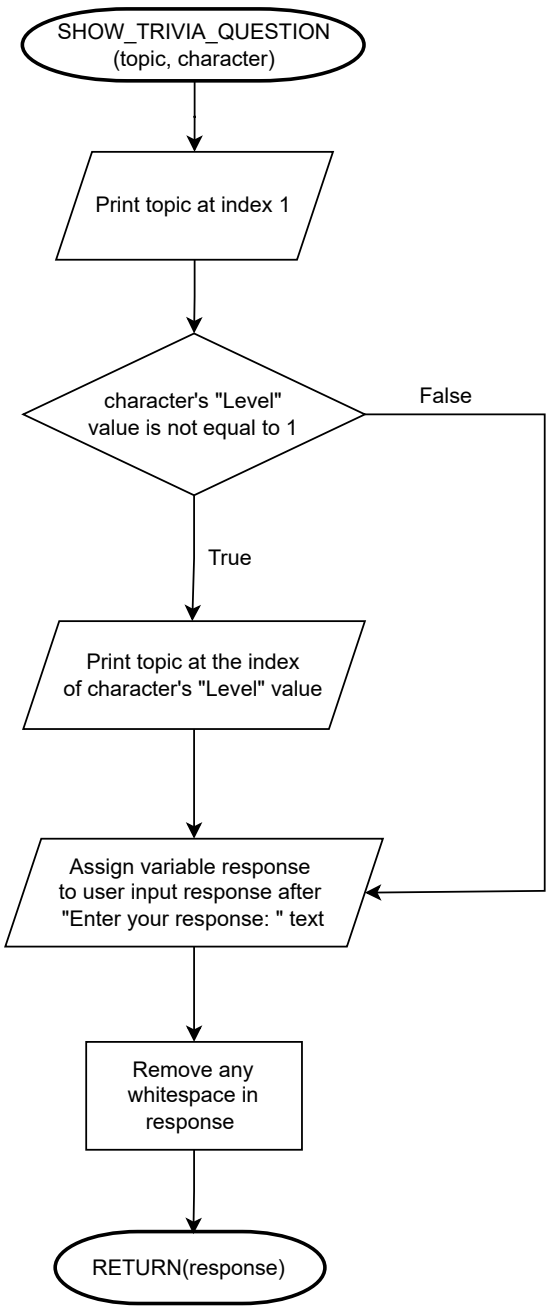
Victor Lum
A01418439



SHOW_TRIVIA_QUESTION (topic, character) flowchart

(as of December 2, 2024)

Victor Lum
A01418439



VERIFY_TRIVIA_RESPONSE (response, topic, character) flowchart

(as of December 2, 2024)

Victor Lum
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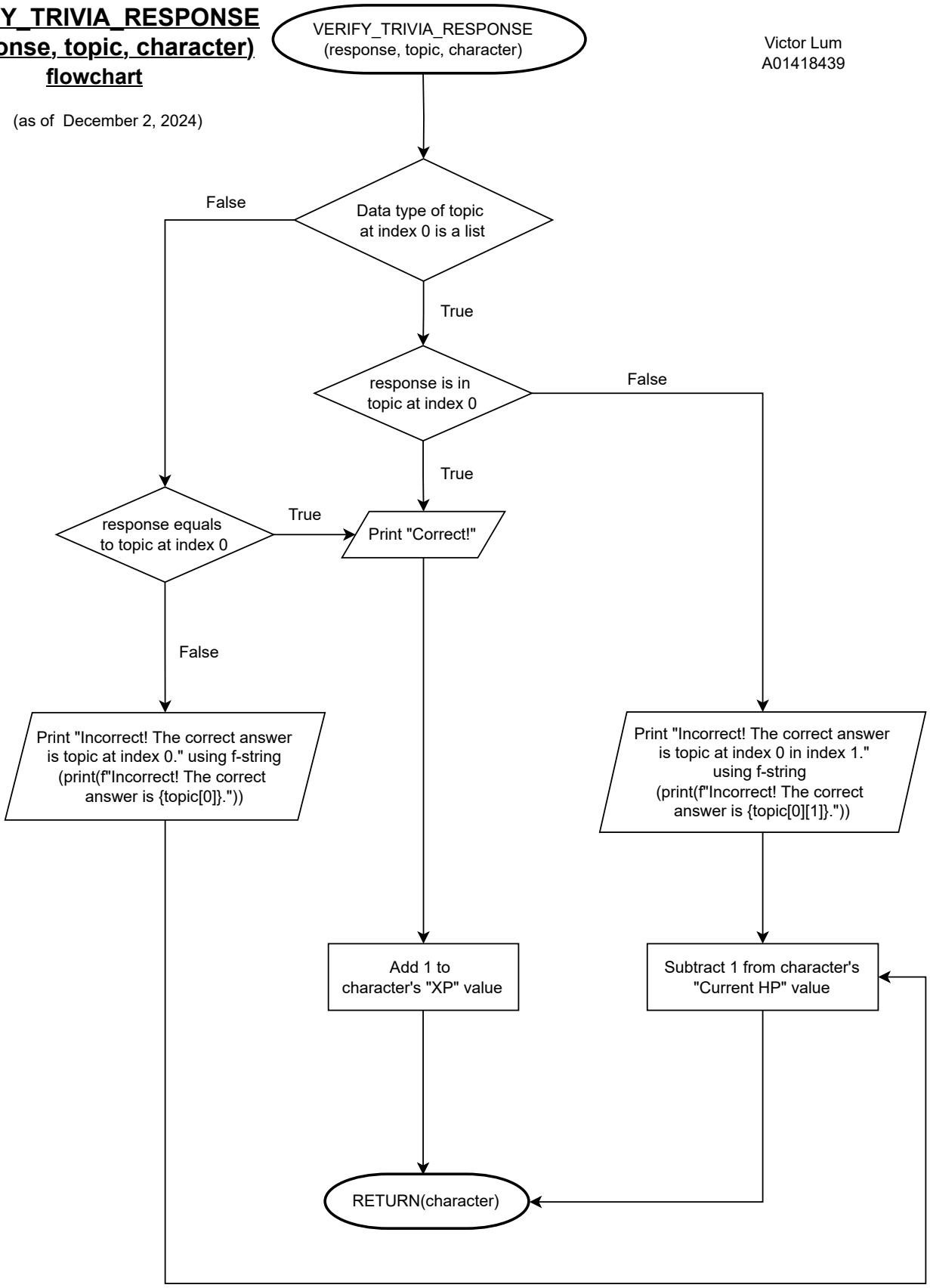
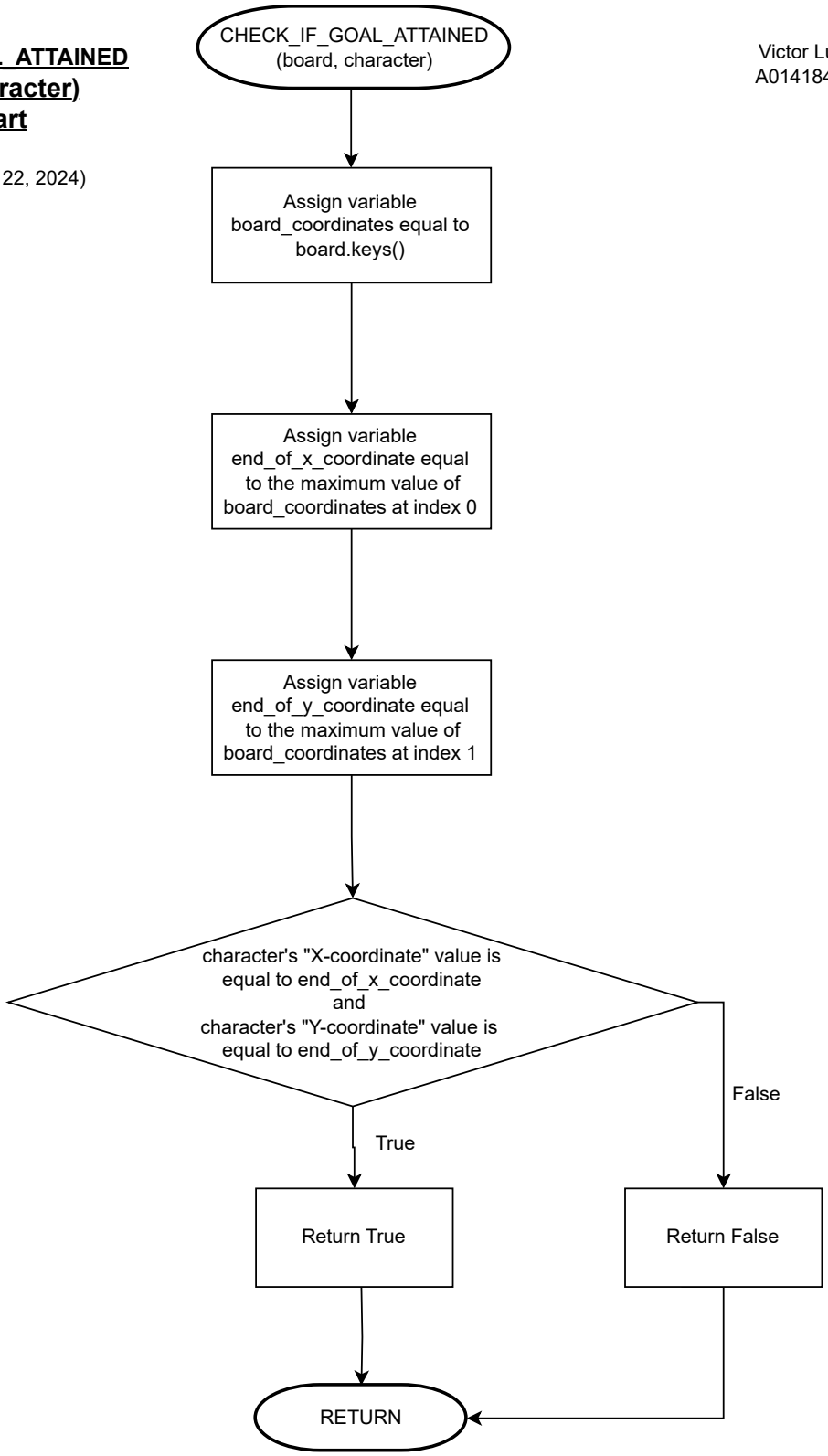


CHECK_IF_GOAL_ATTAINED (board, character) flowchart

(as of November 22, 2024)

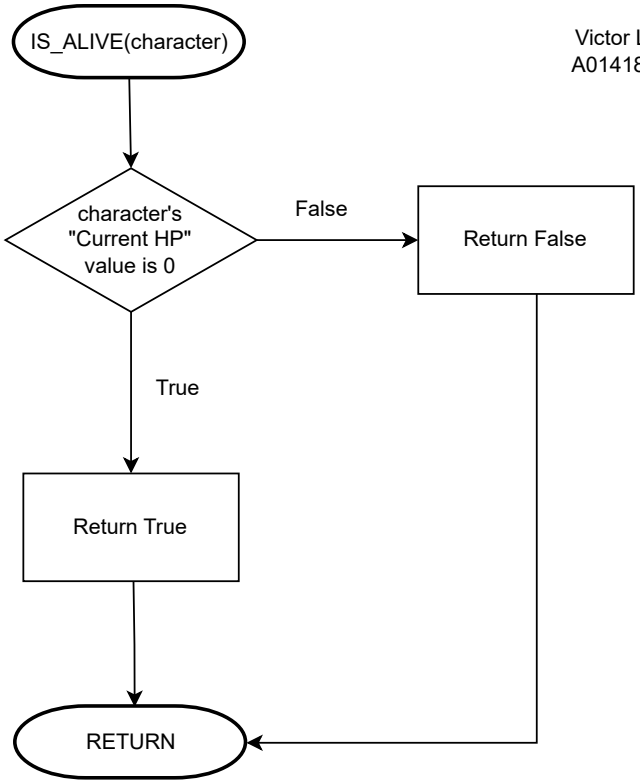
Victor Lum
A01418439



IS_ALIVE(character) flowchart

(as of November 22, 2024)

Victor Lum
A01418439



IS_LEVEL_UP(character) flowchart

(as of December 2, 2024)

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