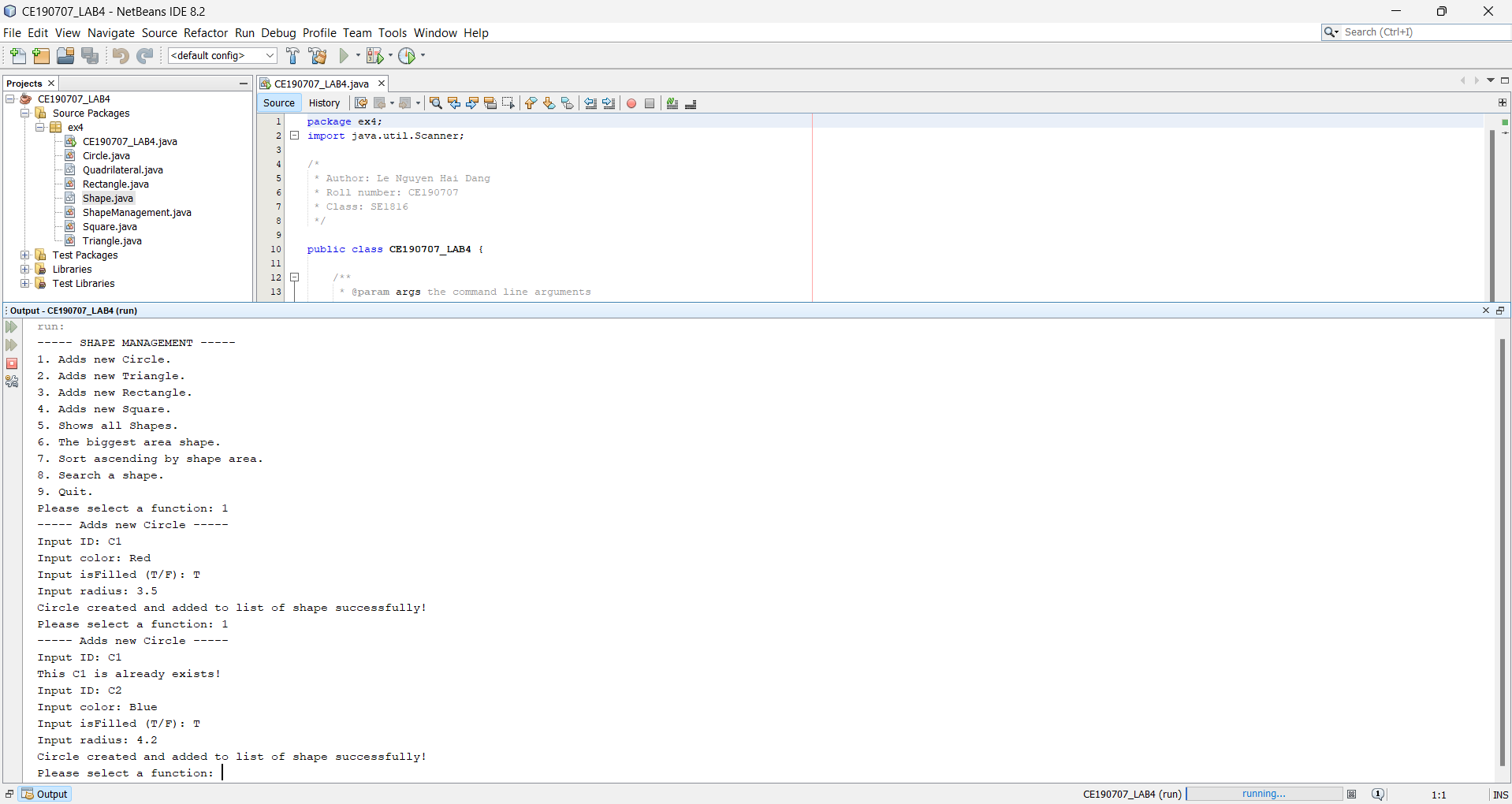
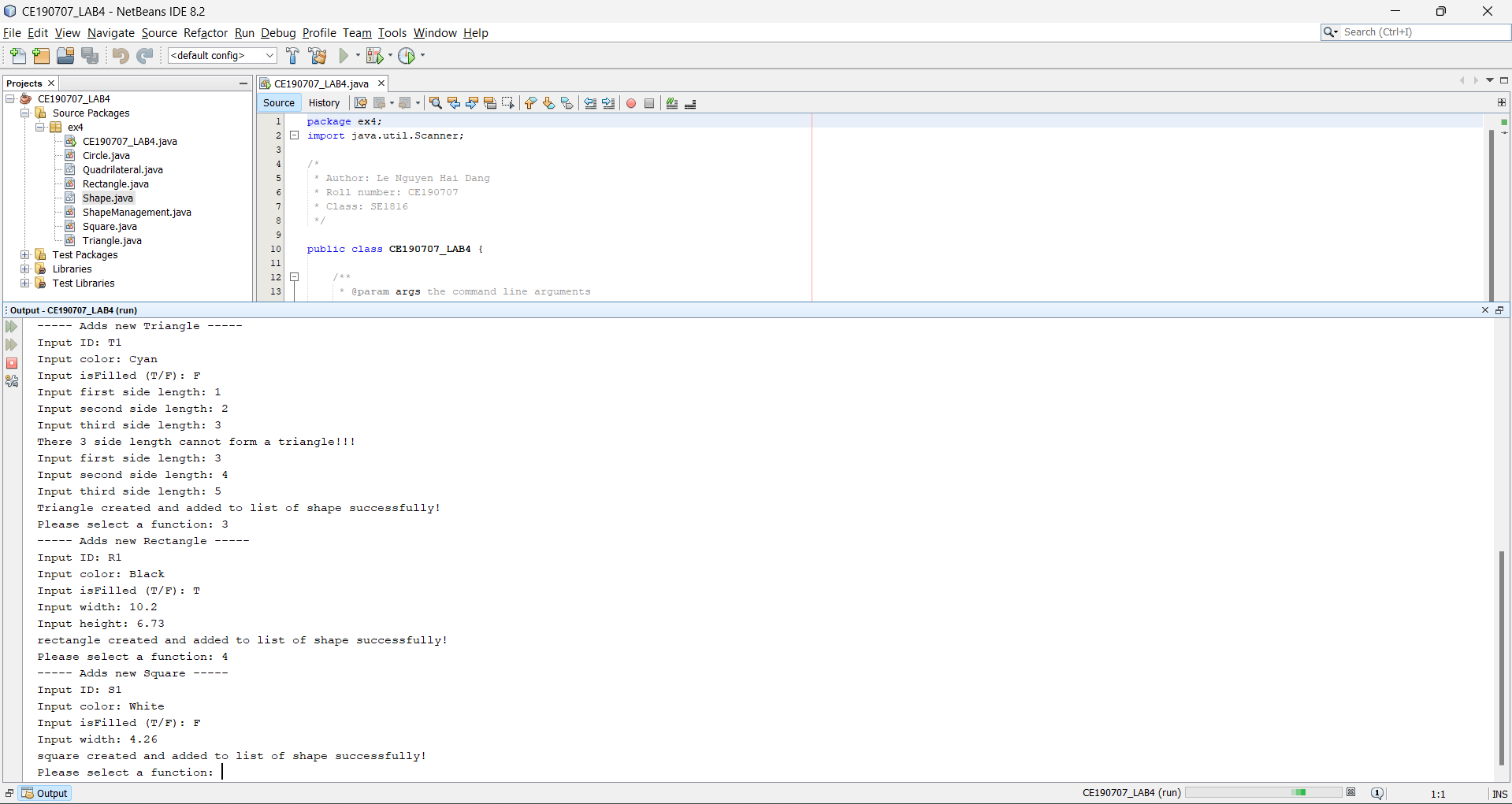
Case 1:

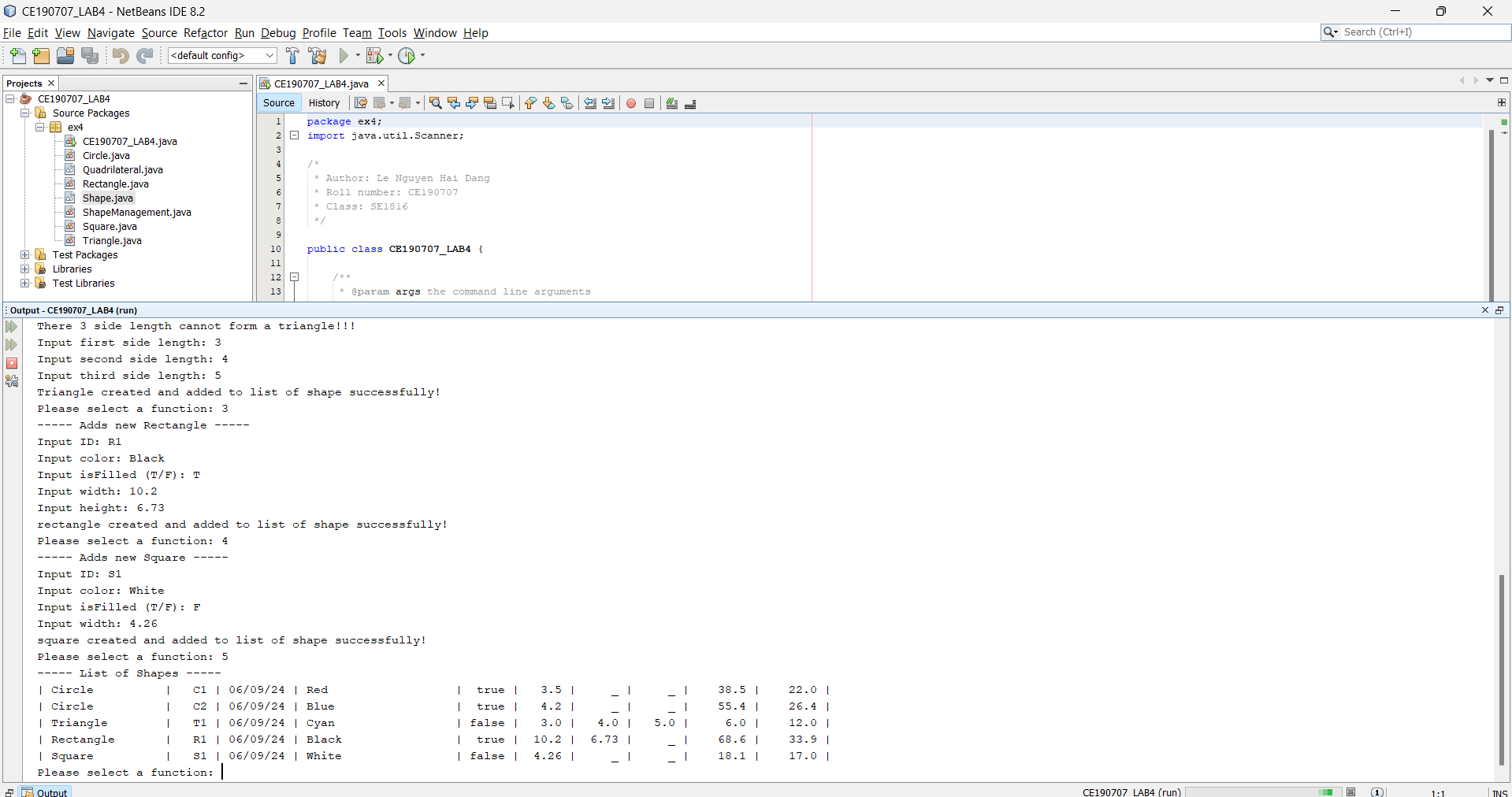
Function 1 (with handling for existing ID)



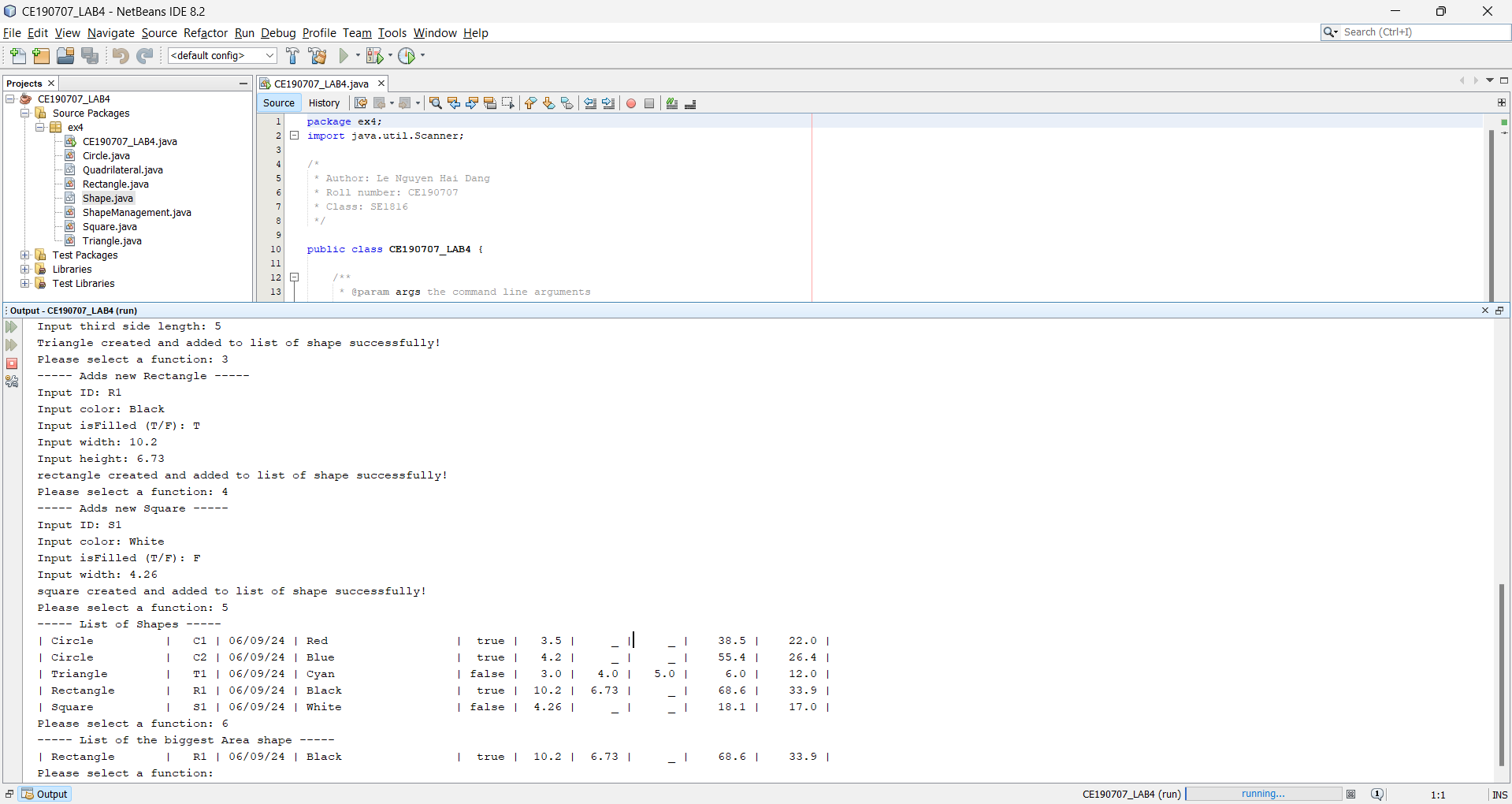
Function 2 (with handling for the case 3 side cannot form a triangle), Function 3, Function 4



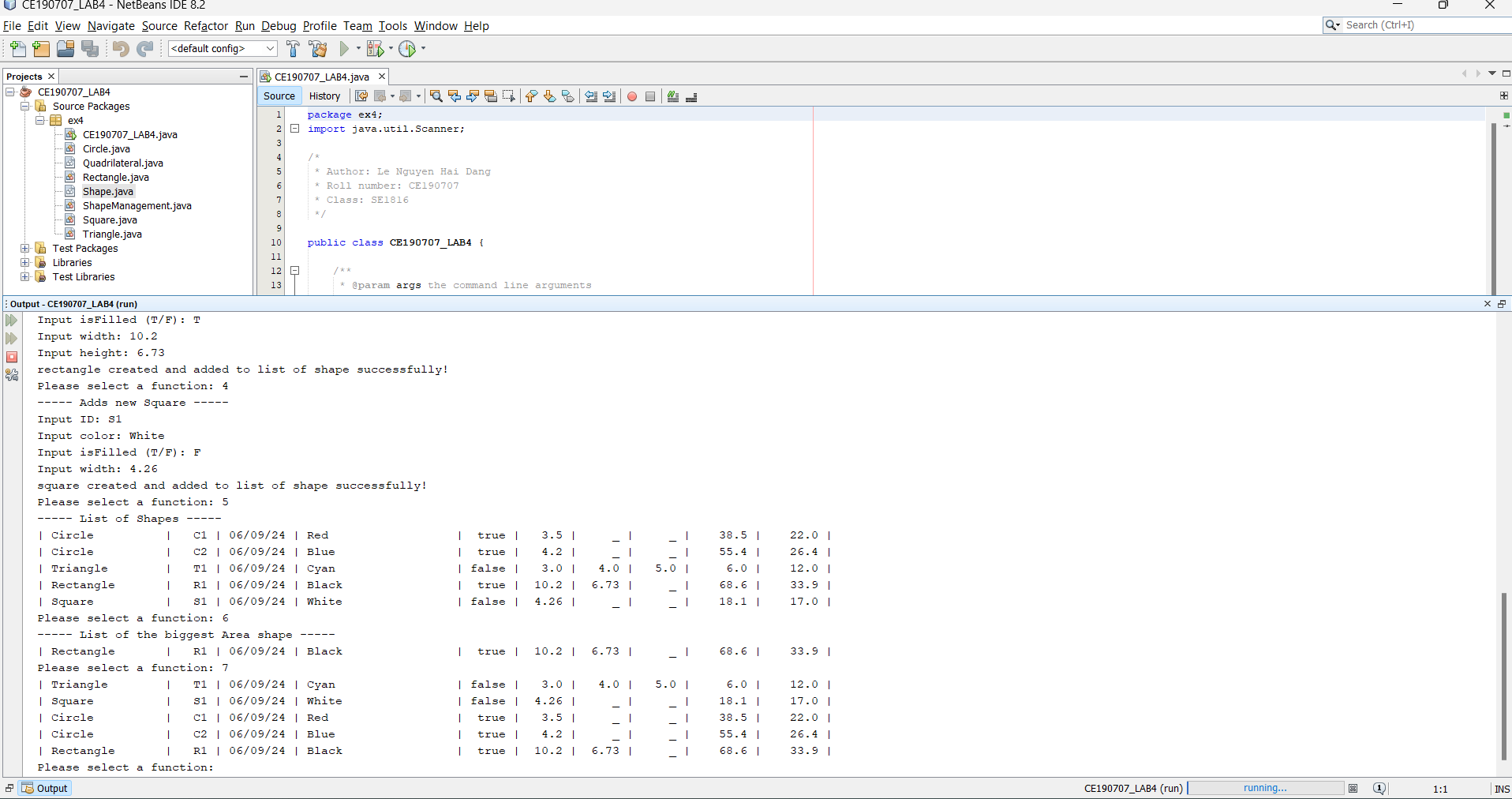
Case 2:



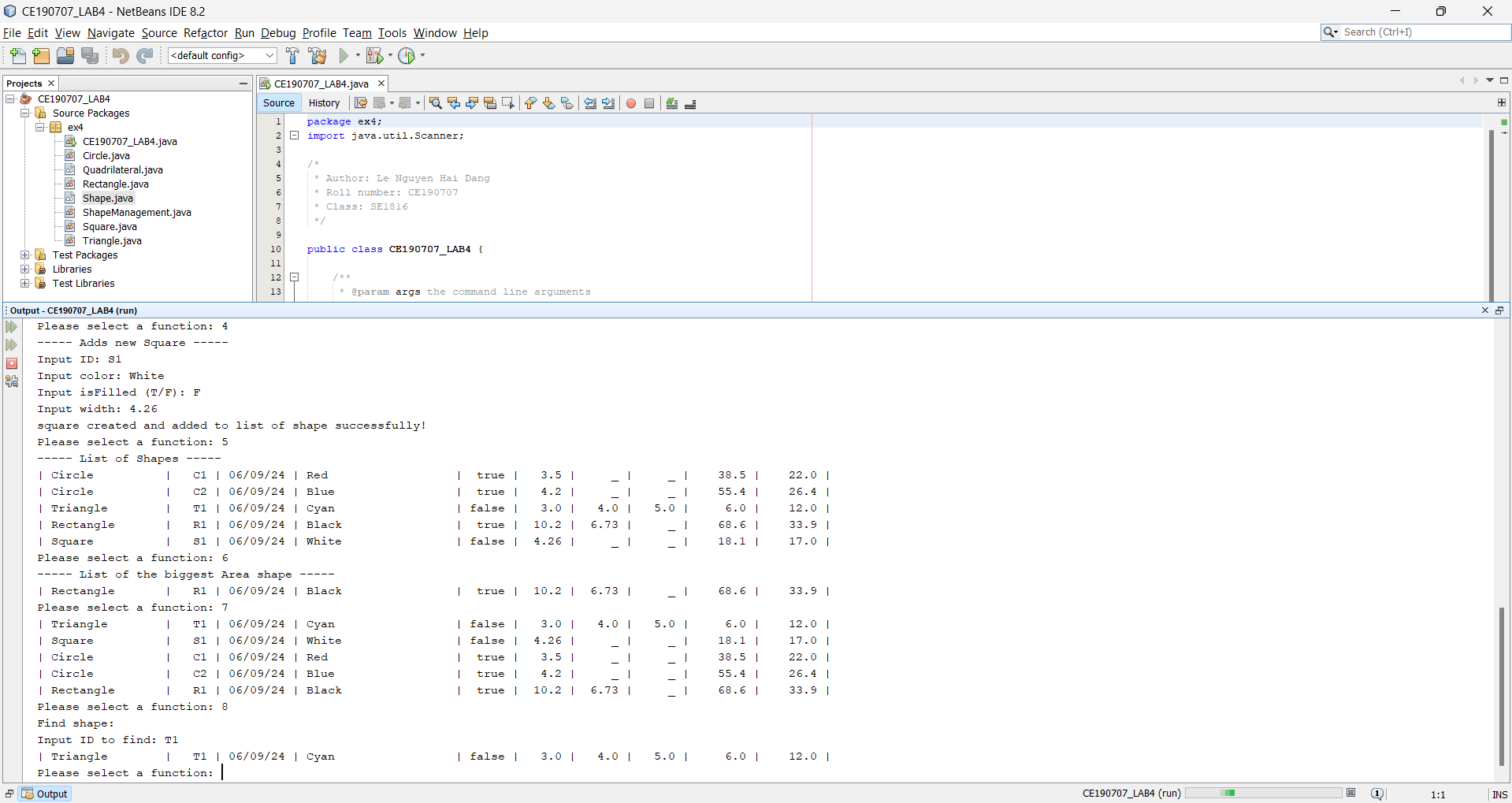
Case 3:



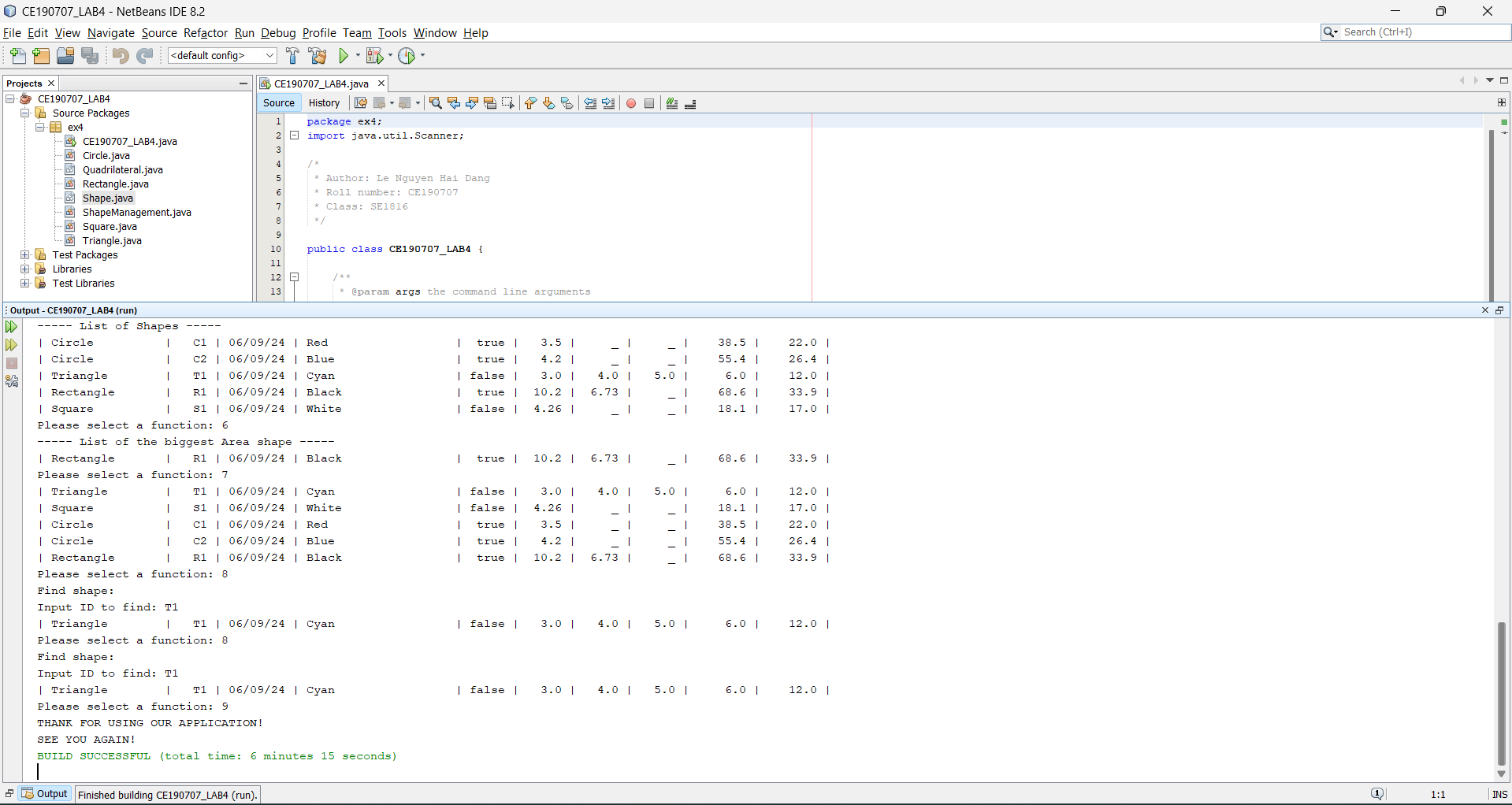
Case 4:



Case 5:



Case 6:



Case 7:

