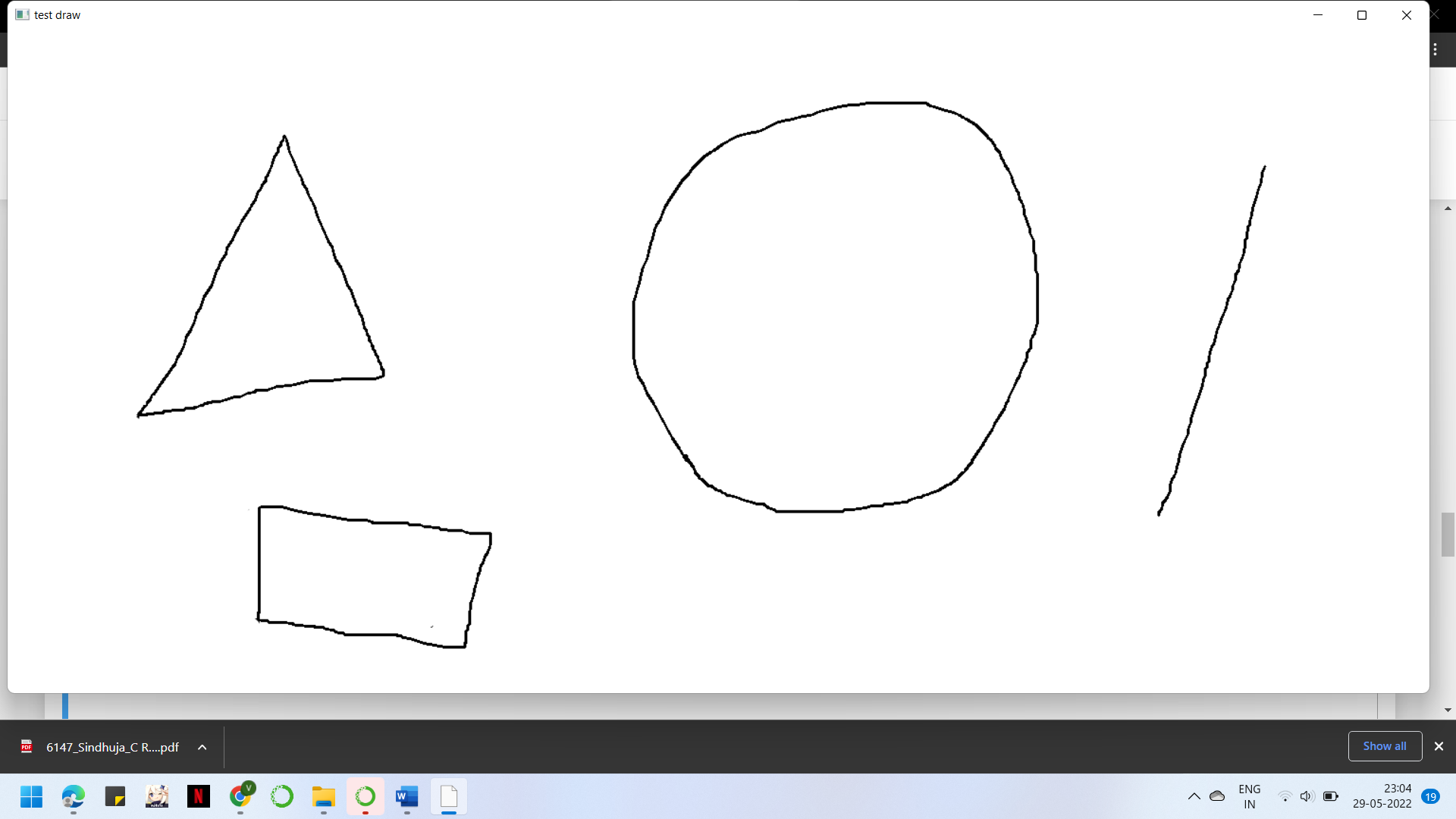
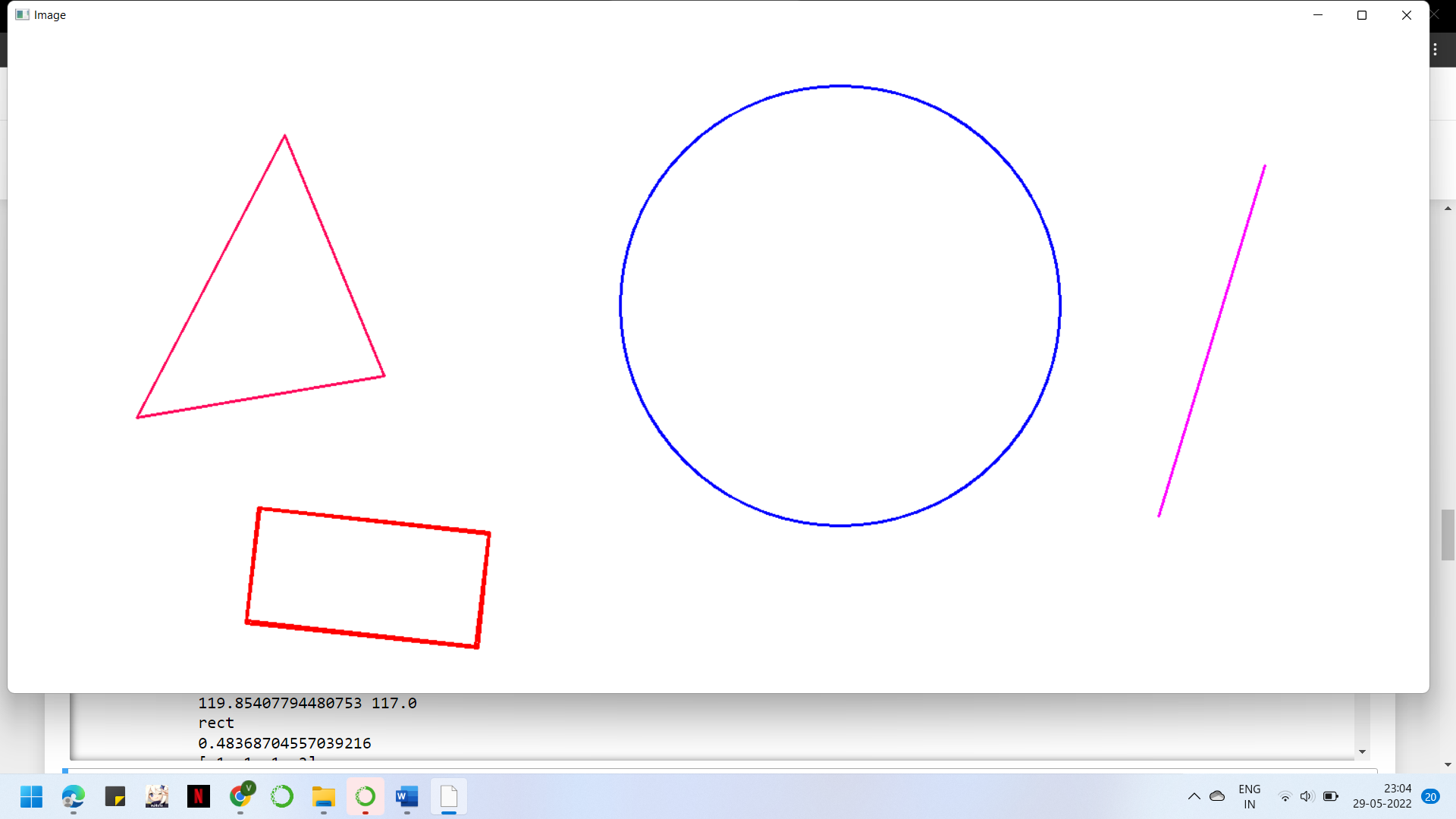
BASIC CASES

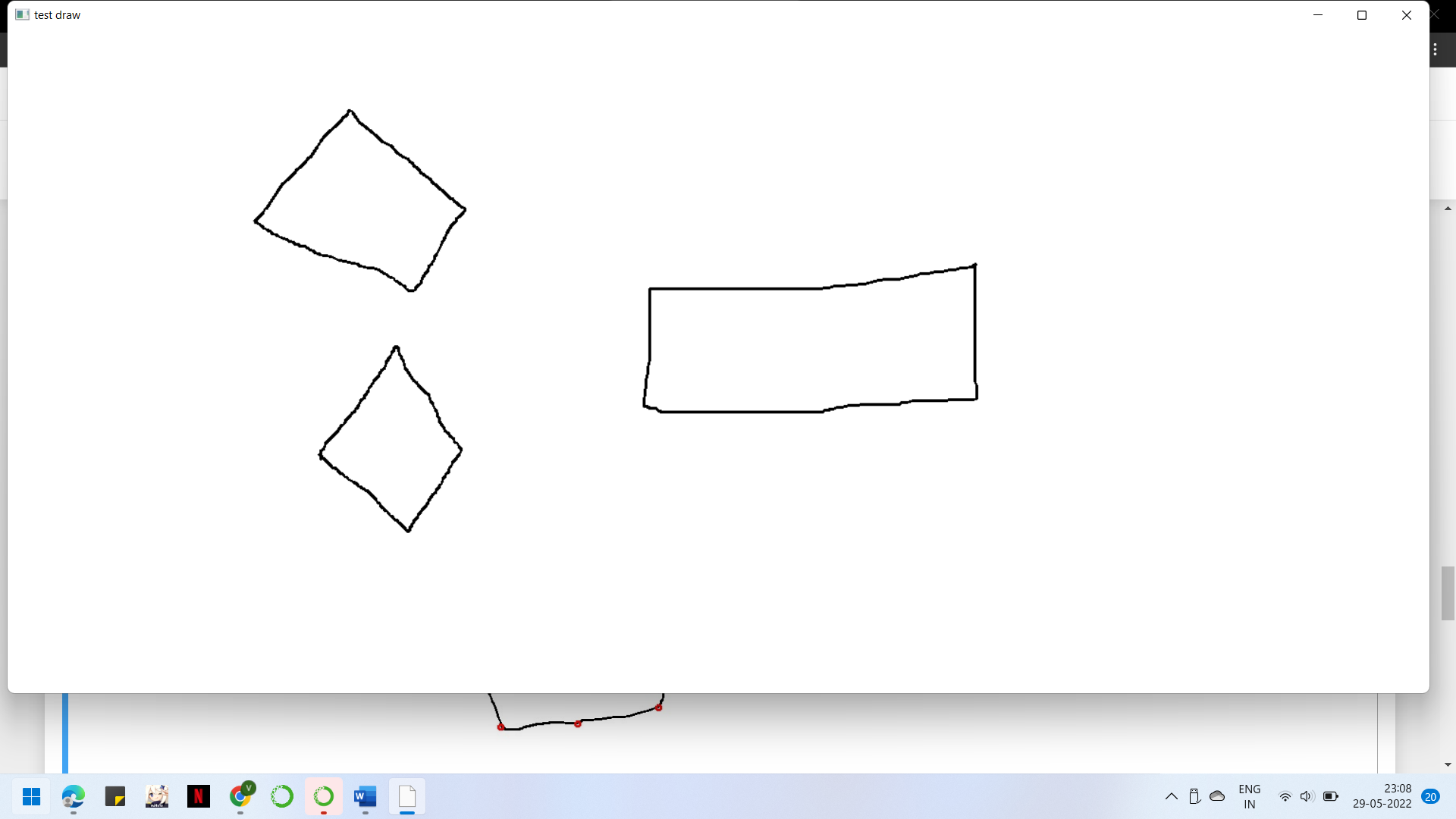
Input 1:



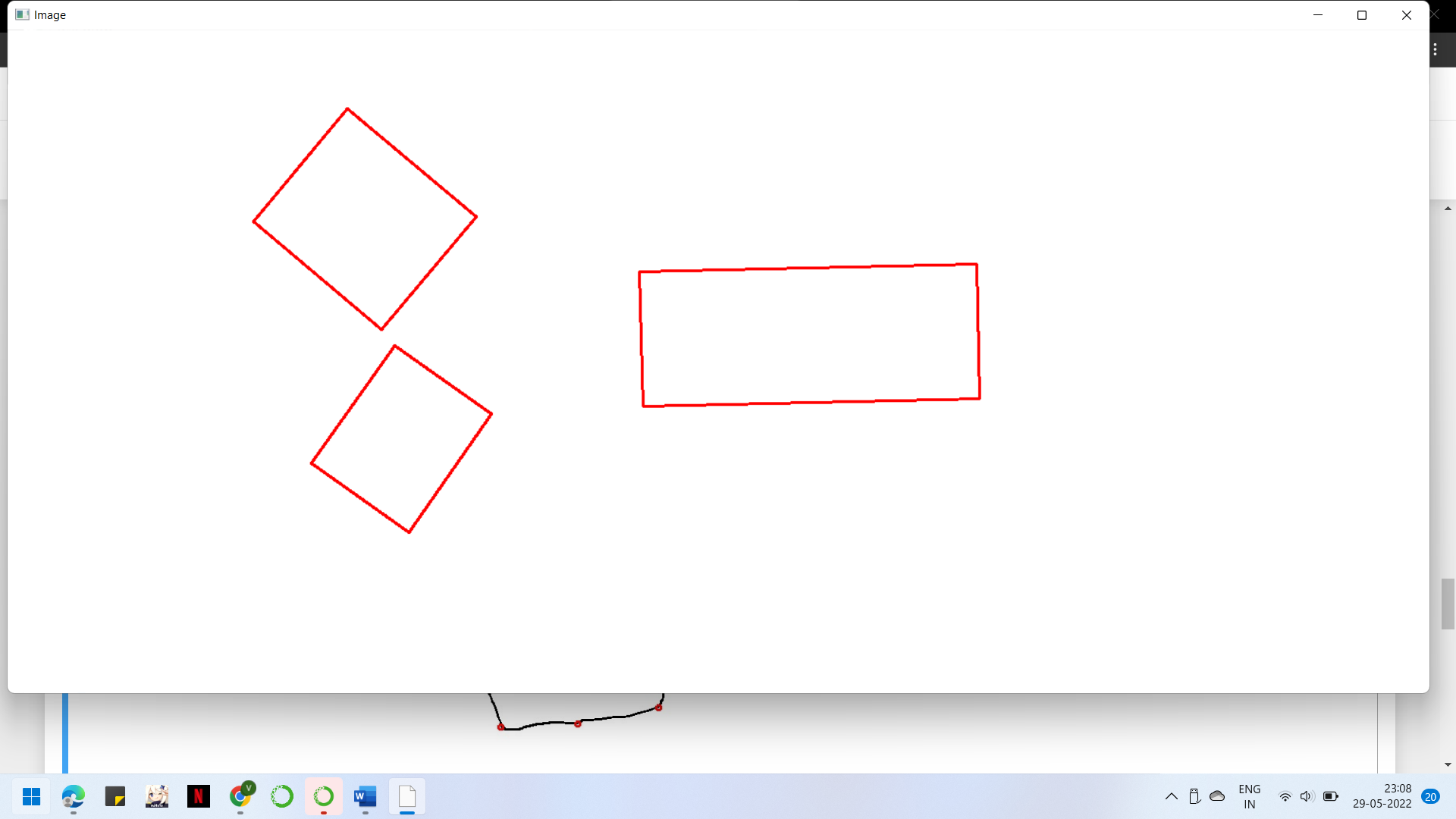
Output:



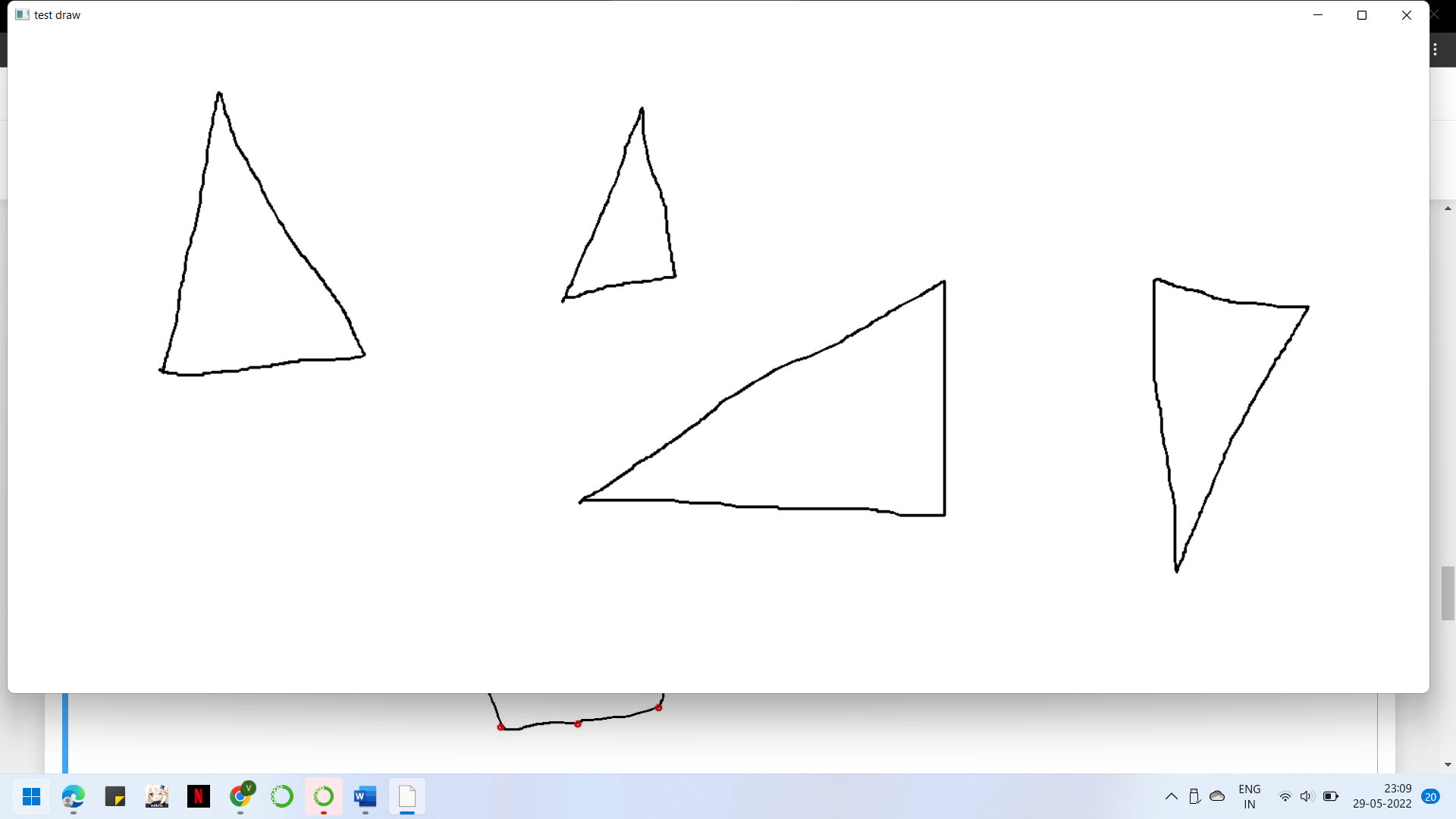
Input 2:



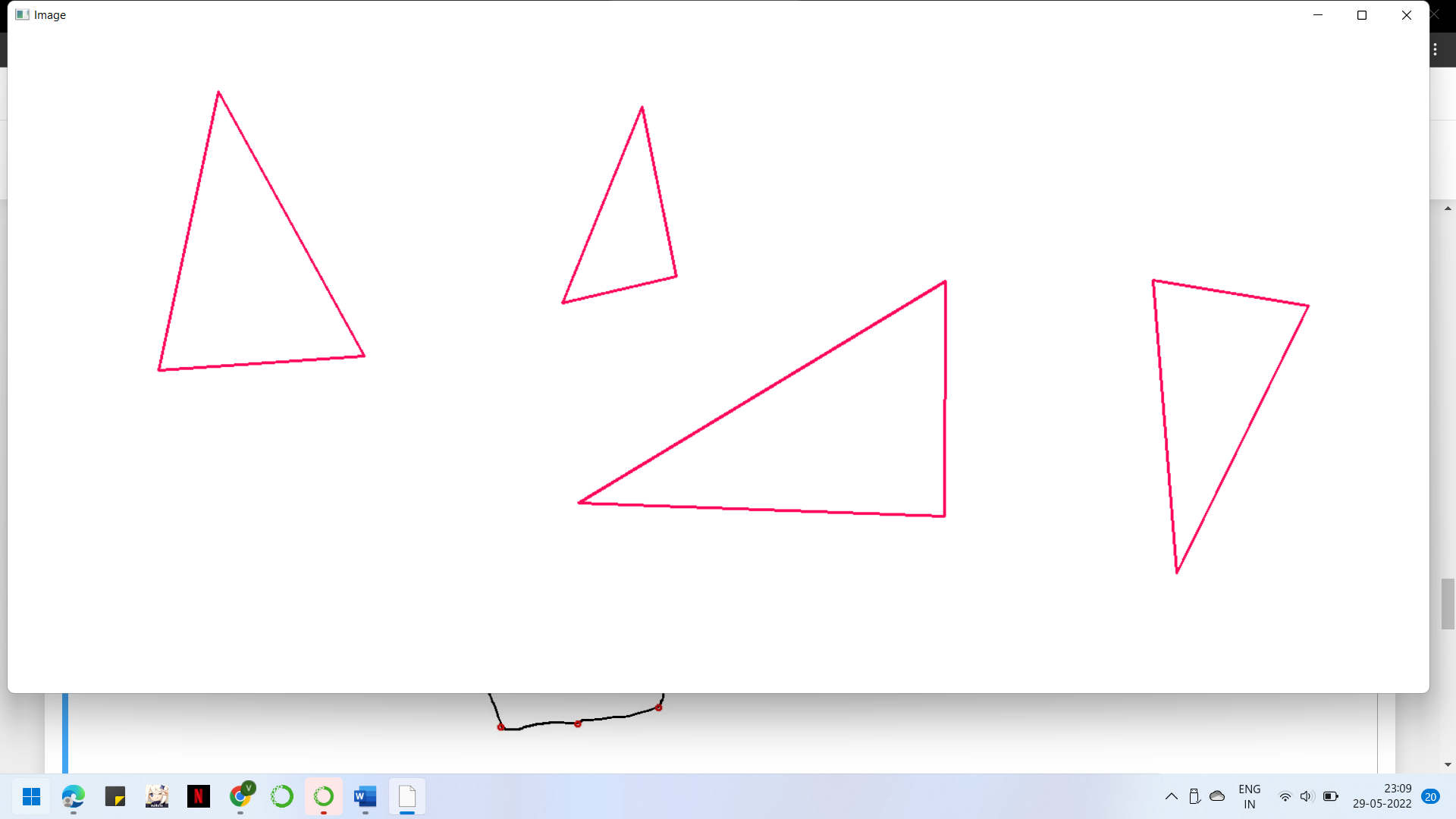
Output:



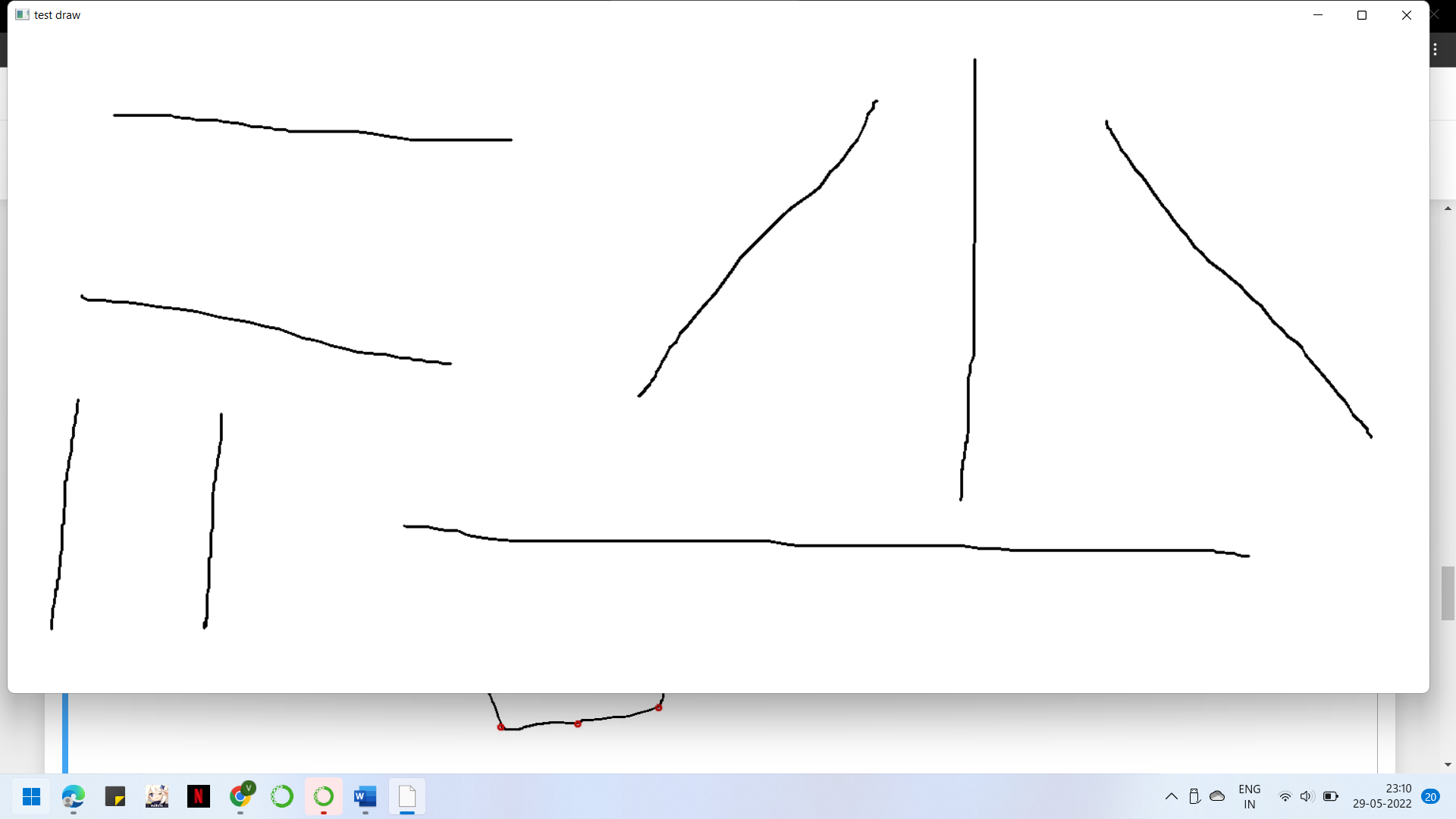
Input 3:



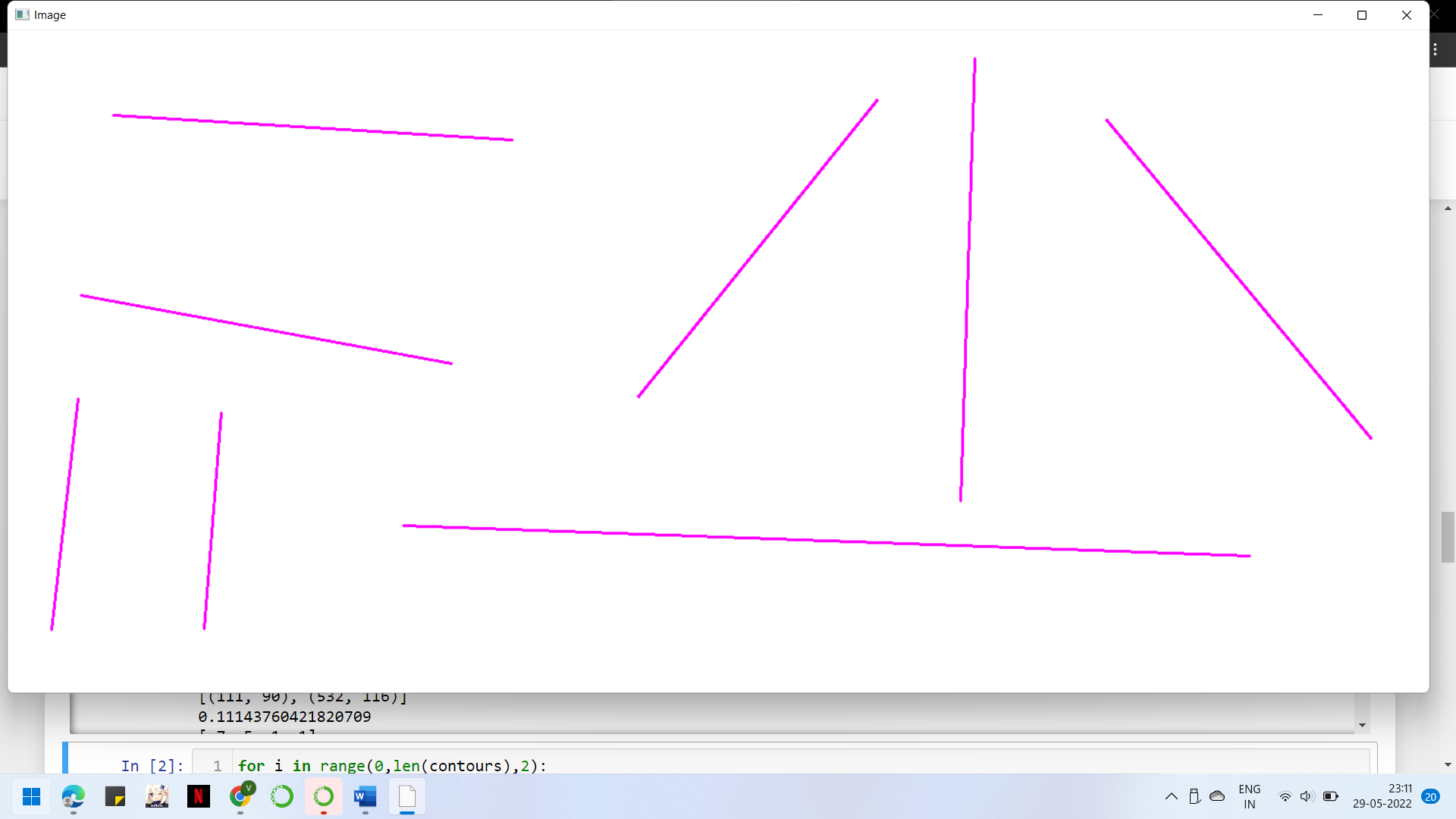
Output:



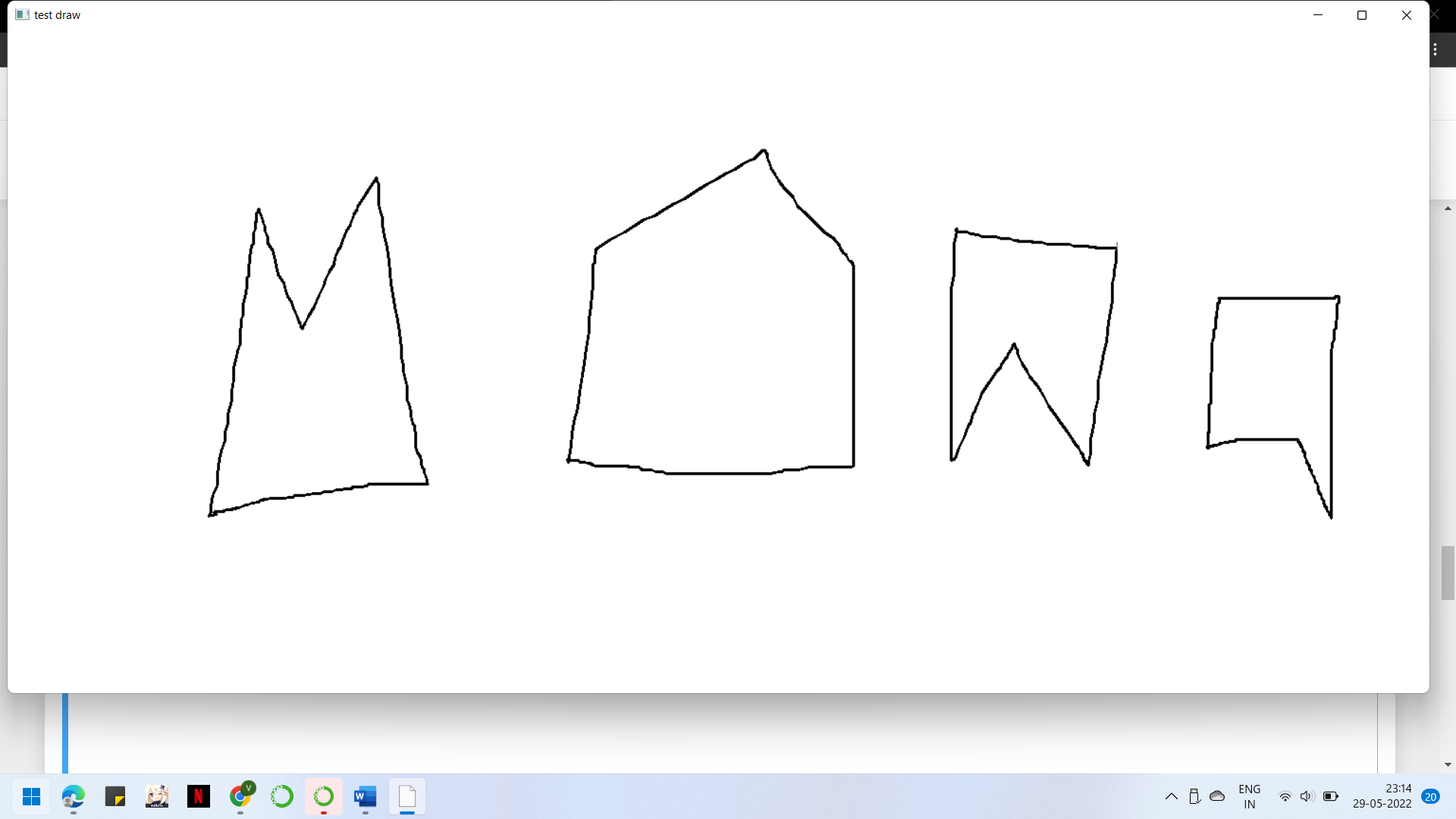
Input 4:



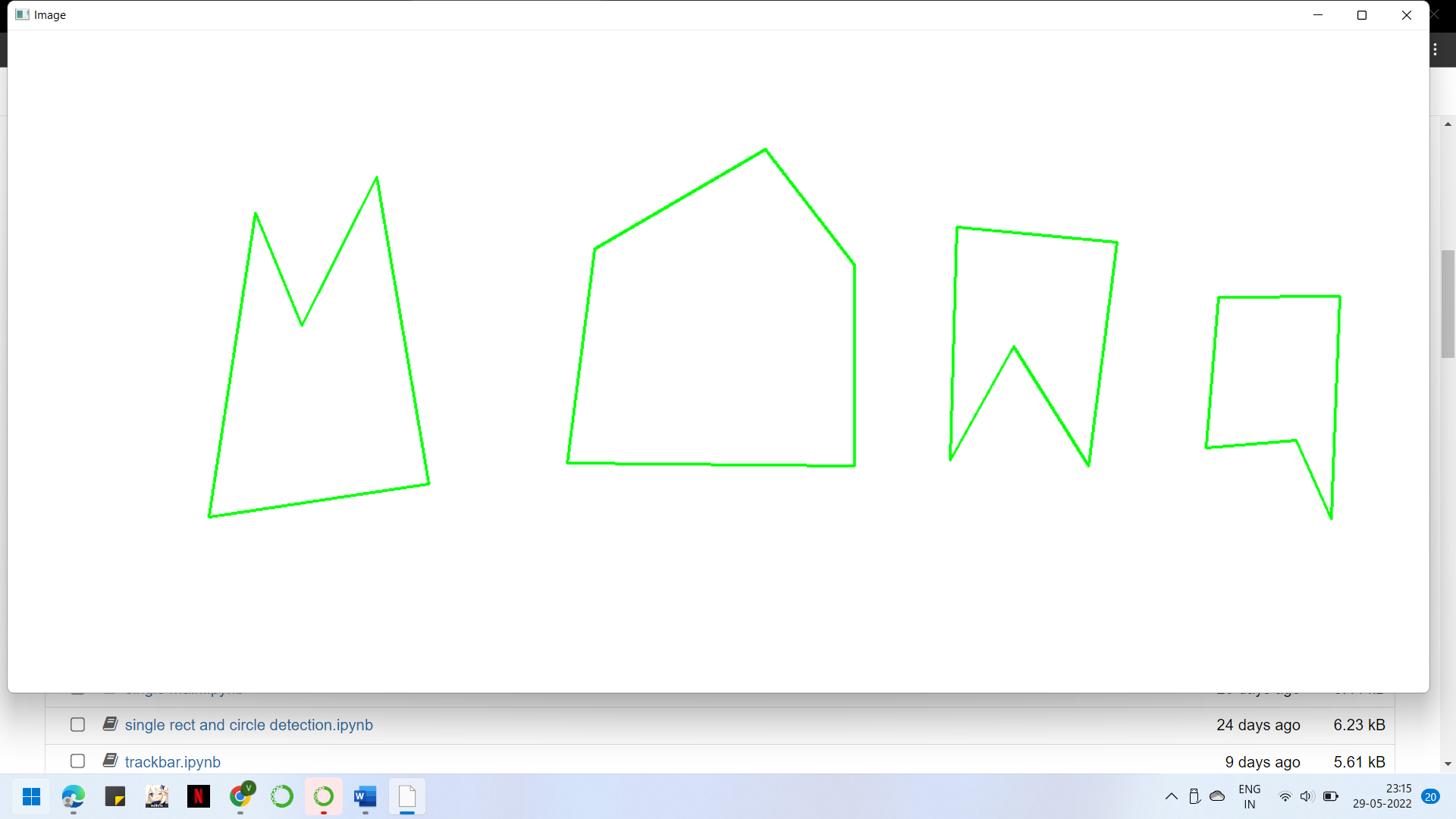
Output 4:



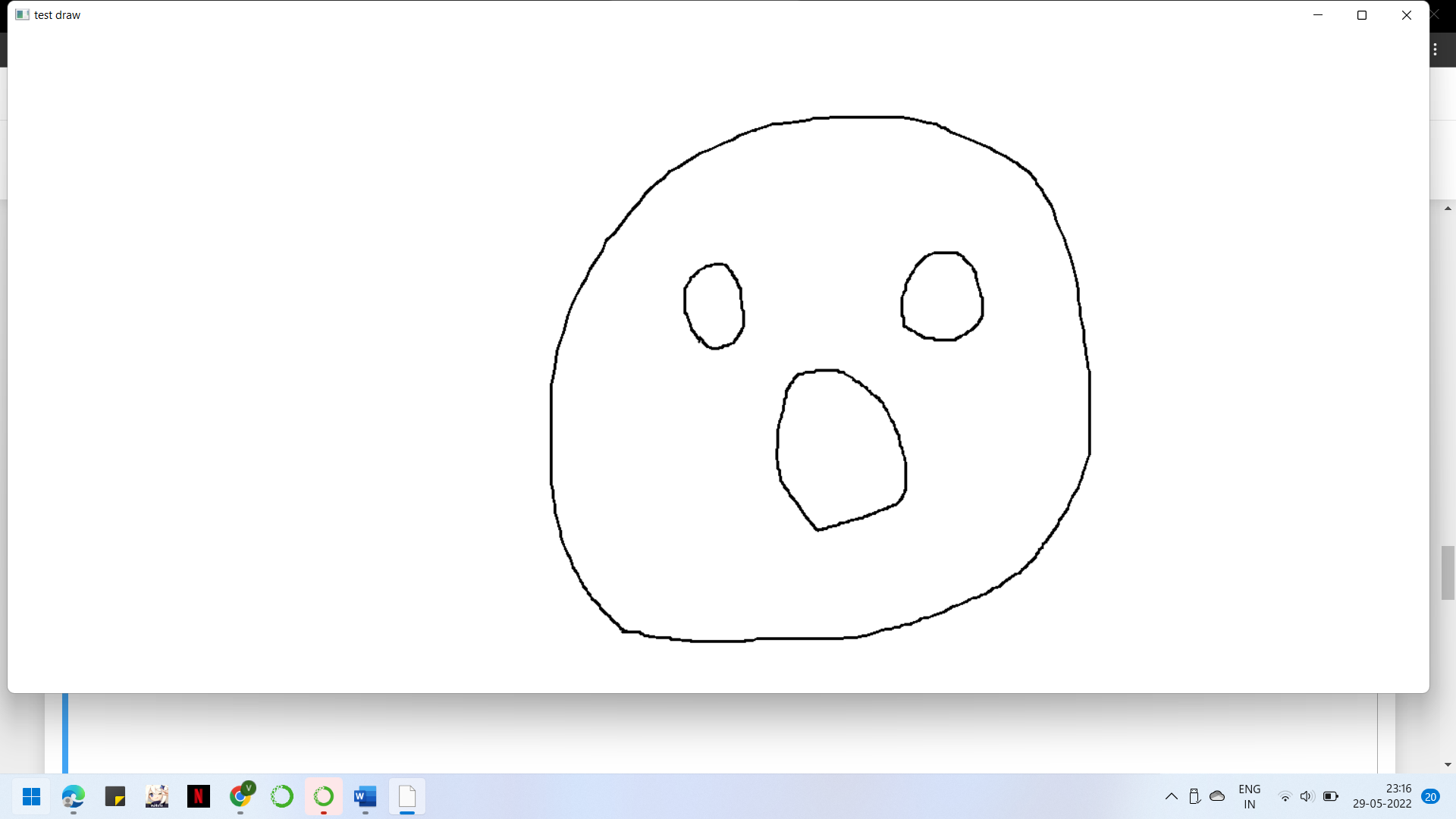
Input:



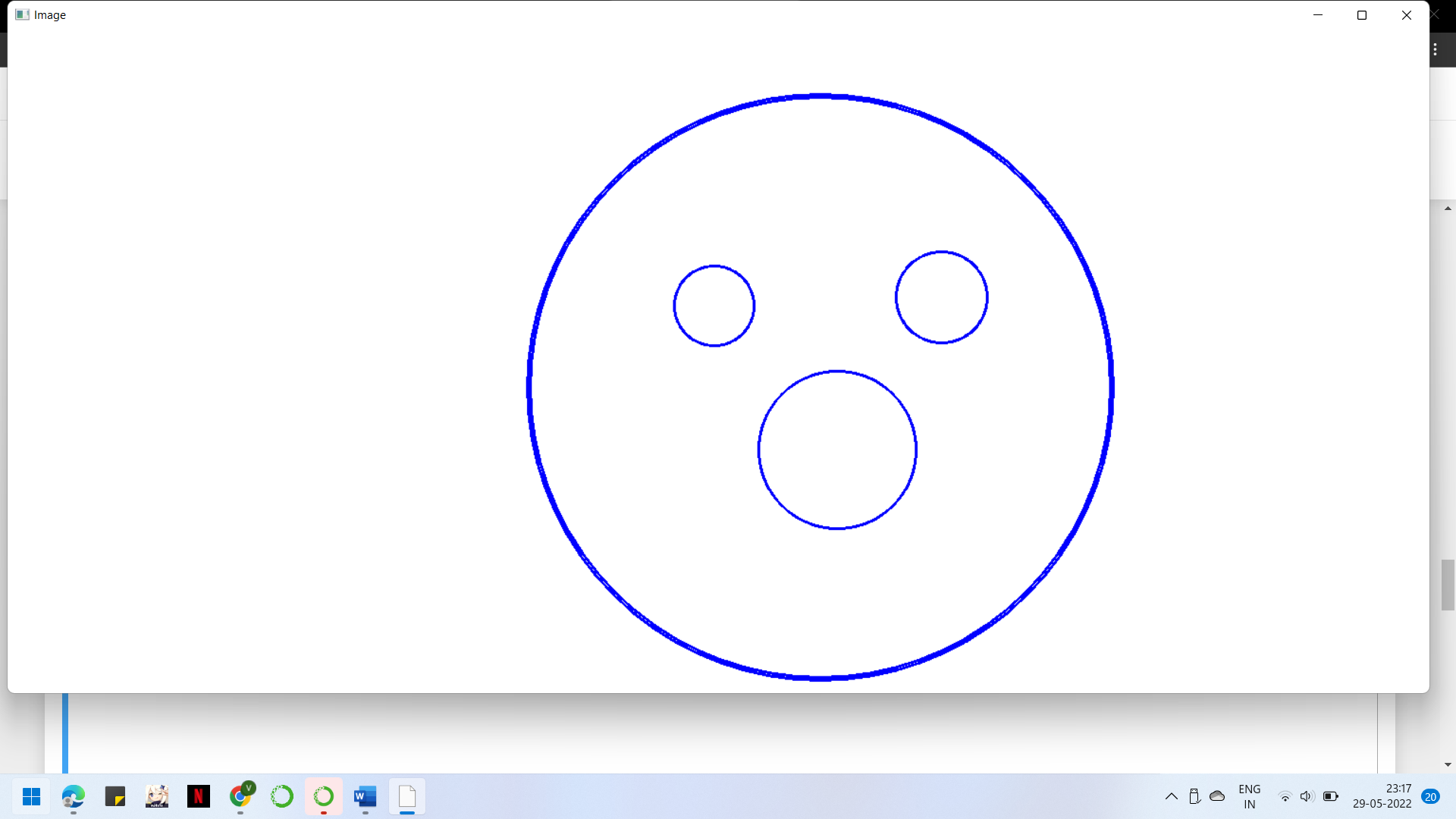
Output:



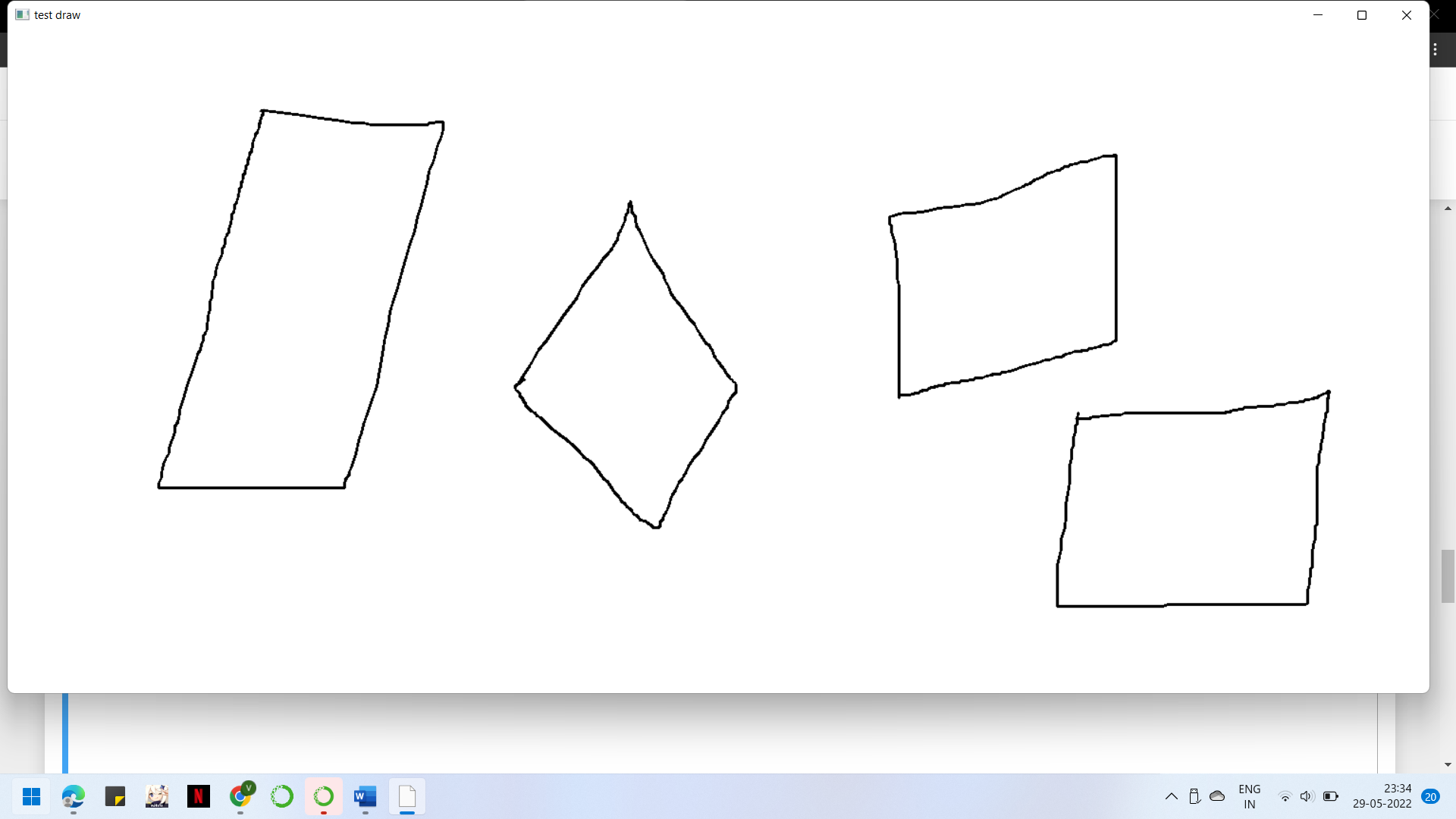
Input:



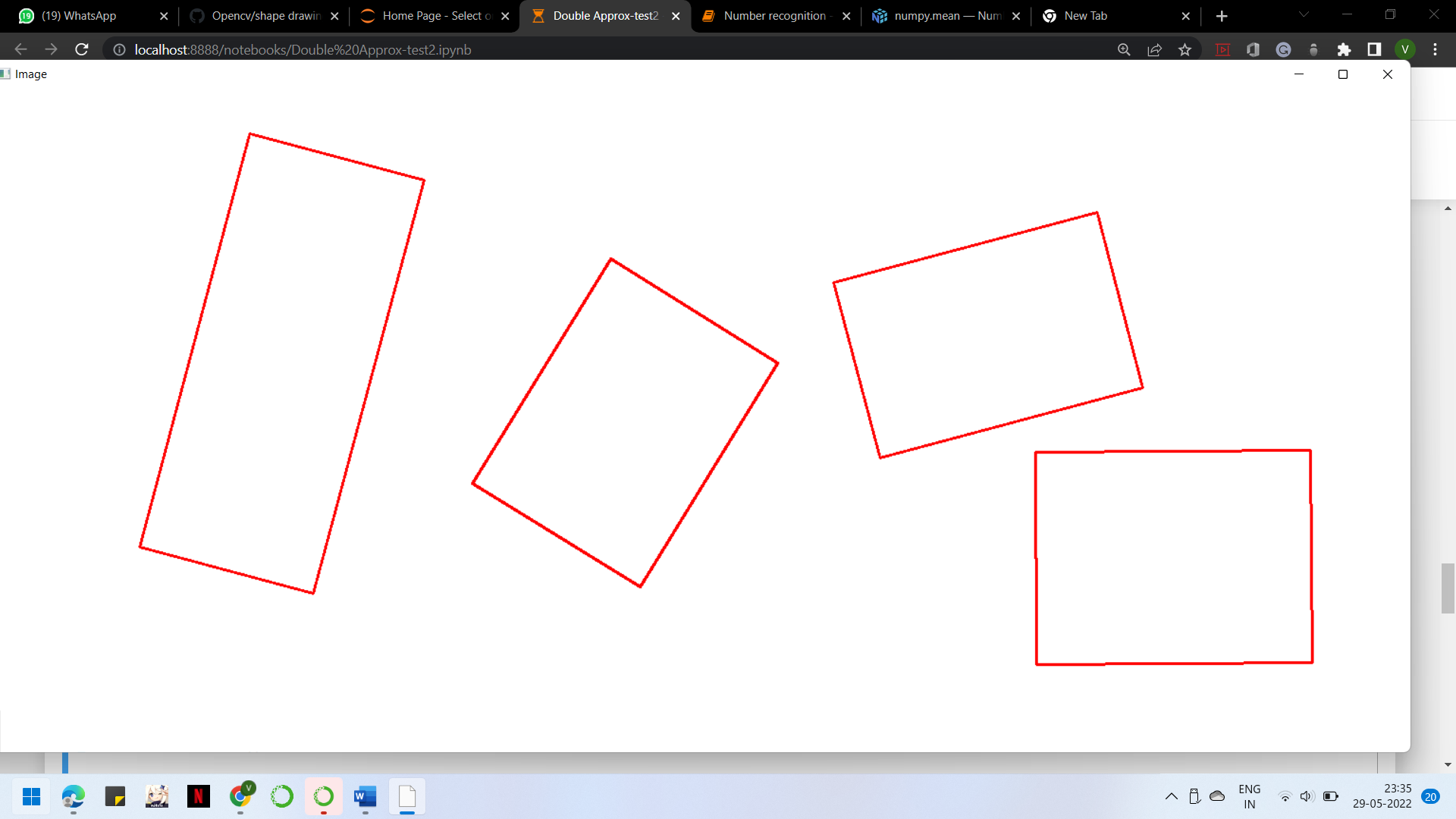
Output:



Input:

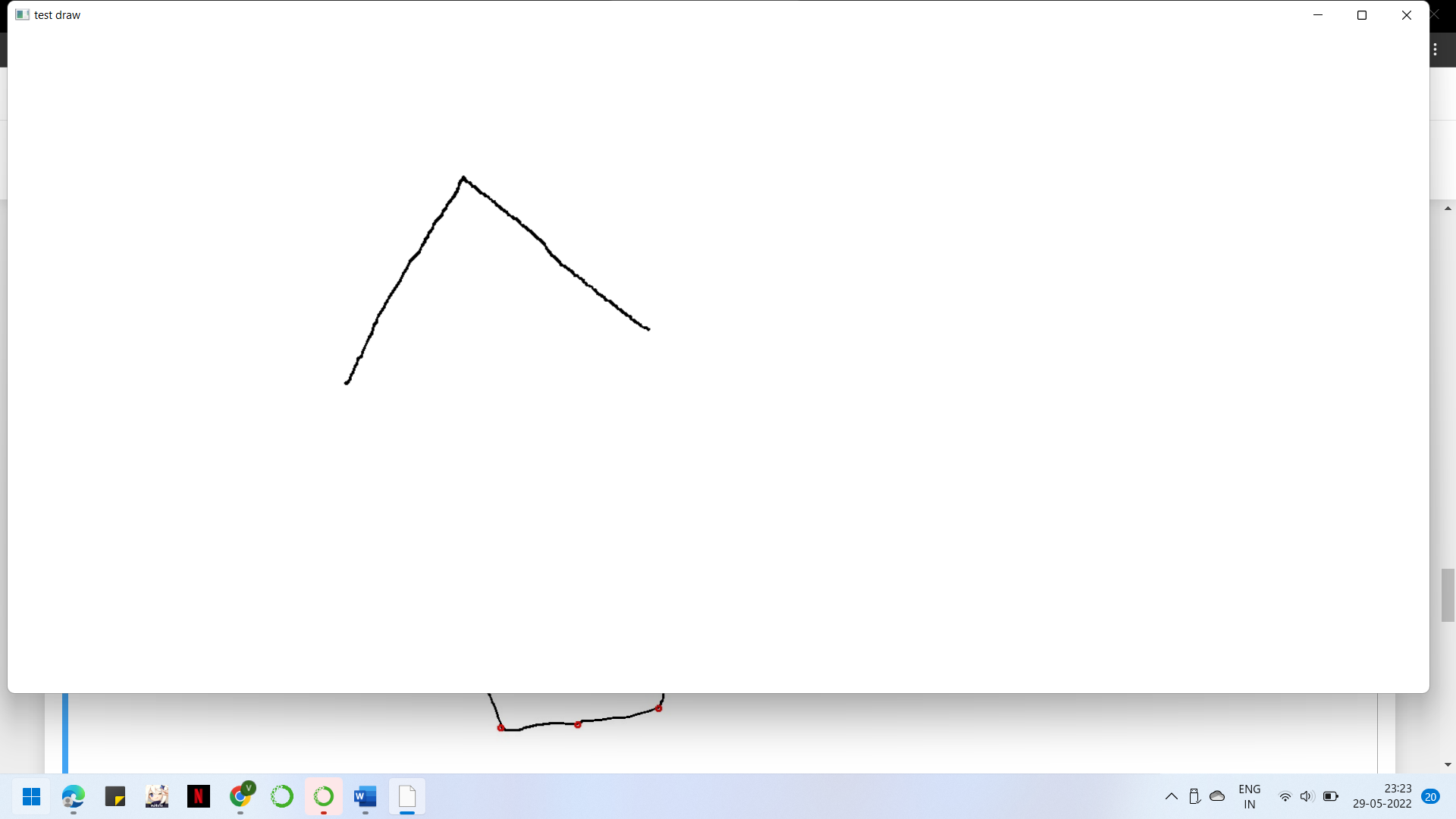


Output:

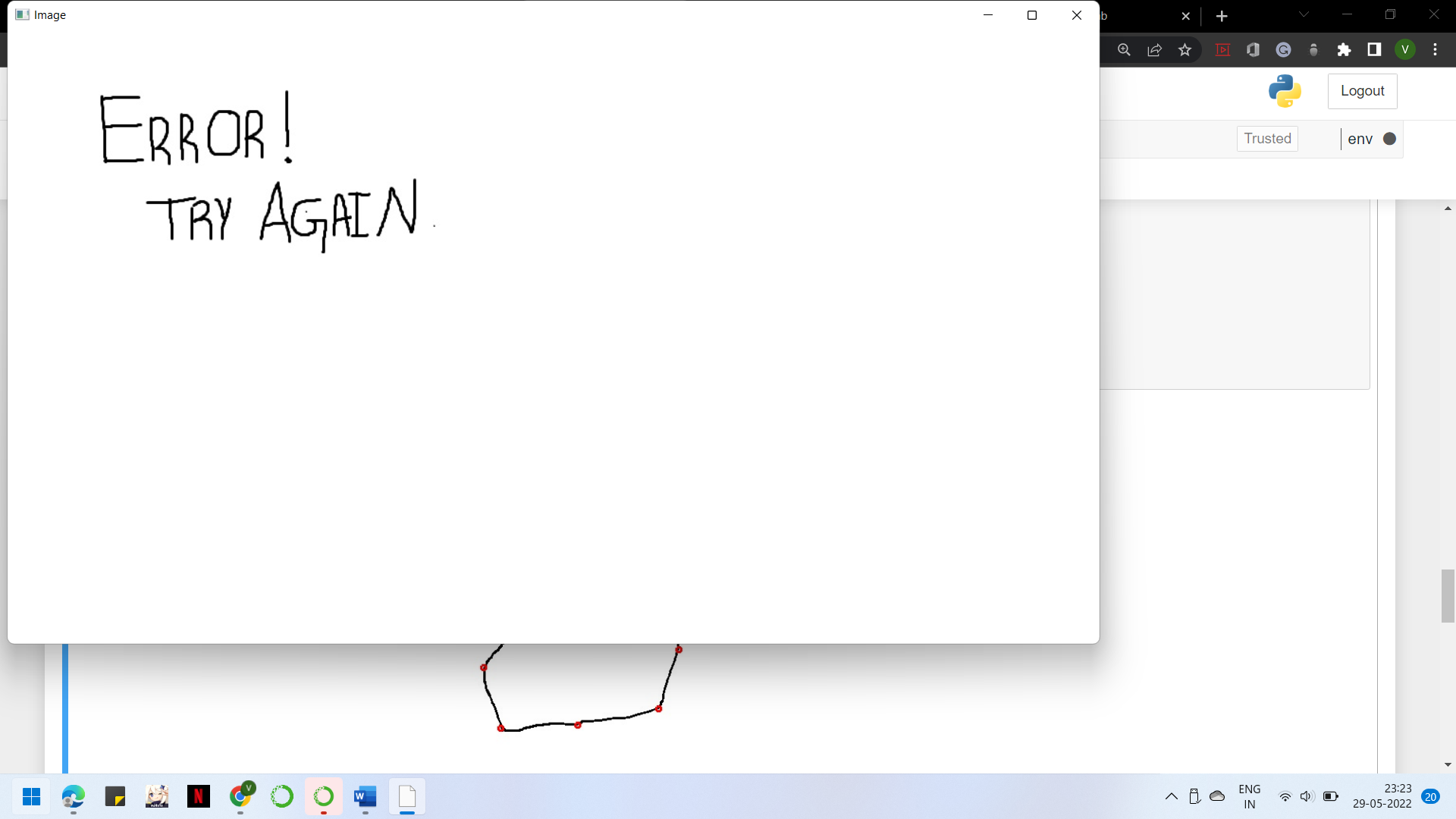


CORNER CASE

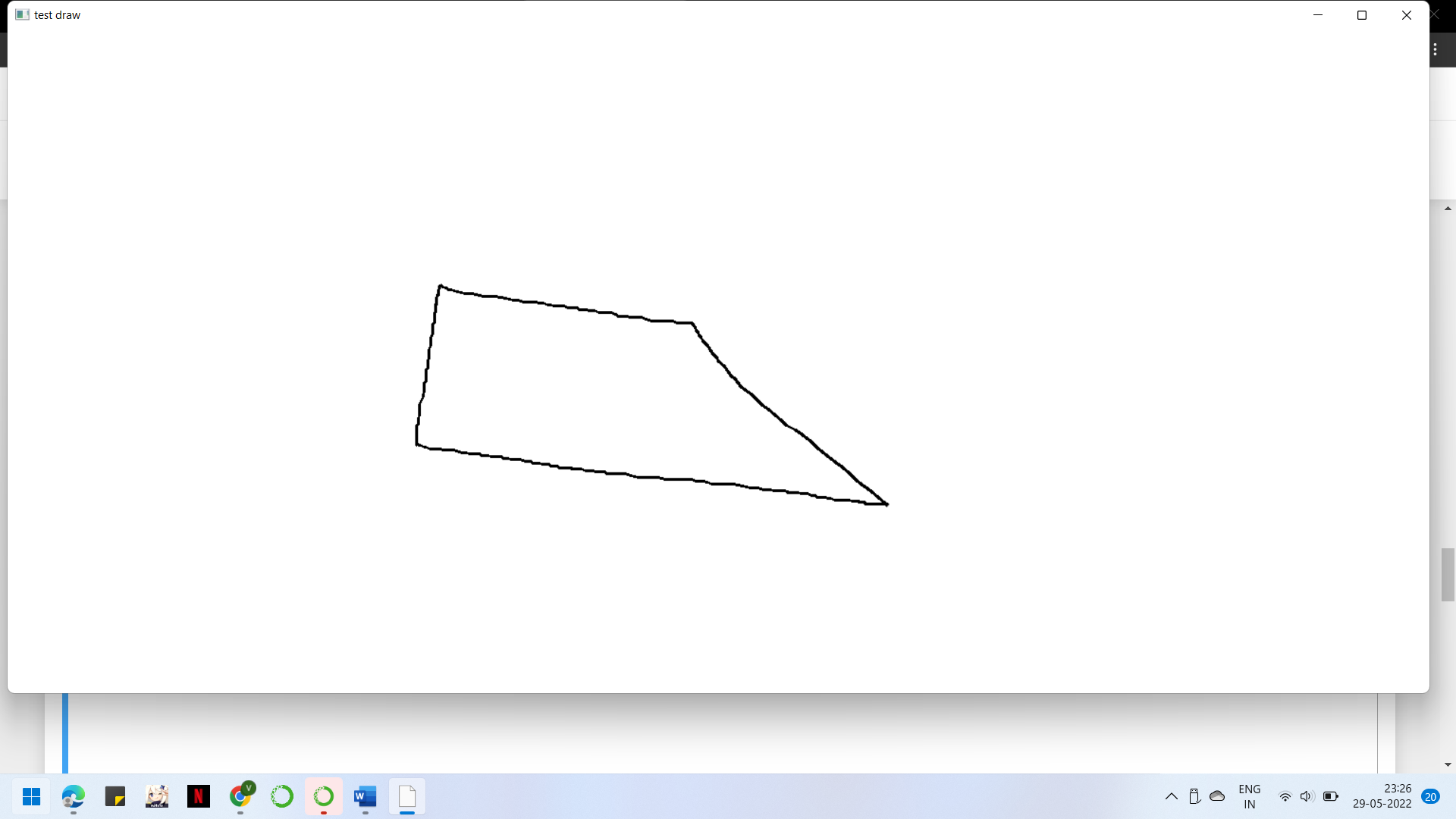
Input:



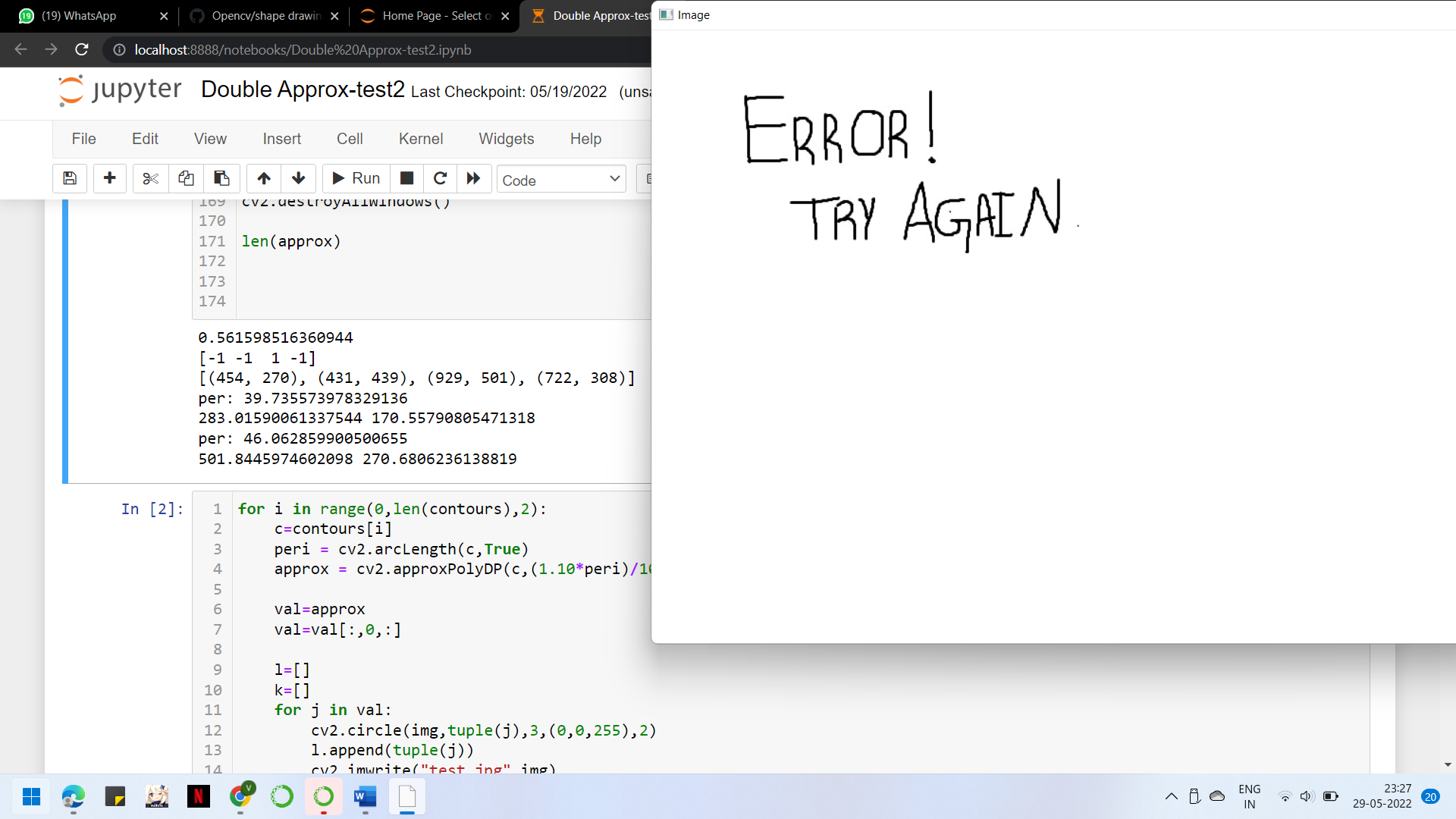
Output:



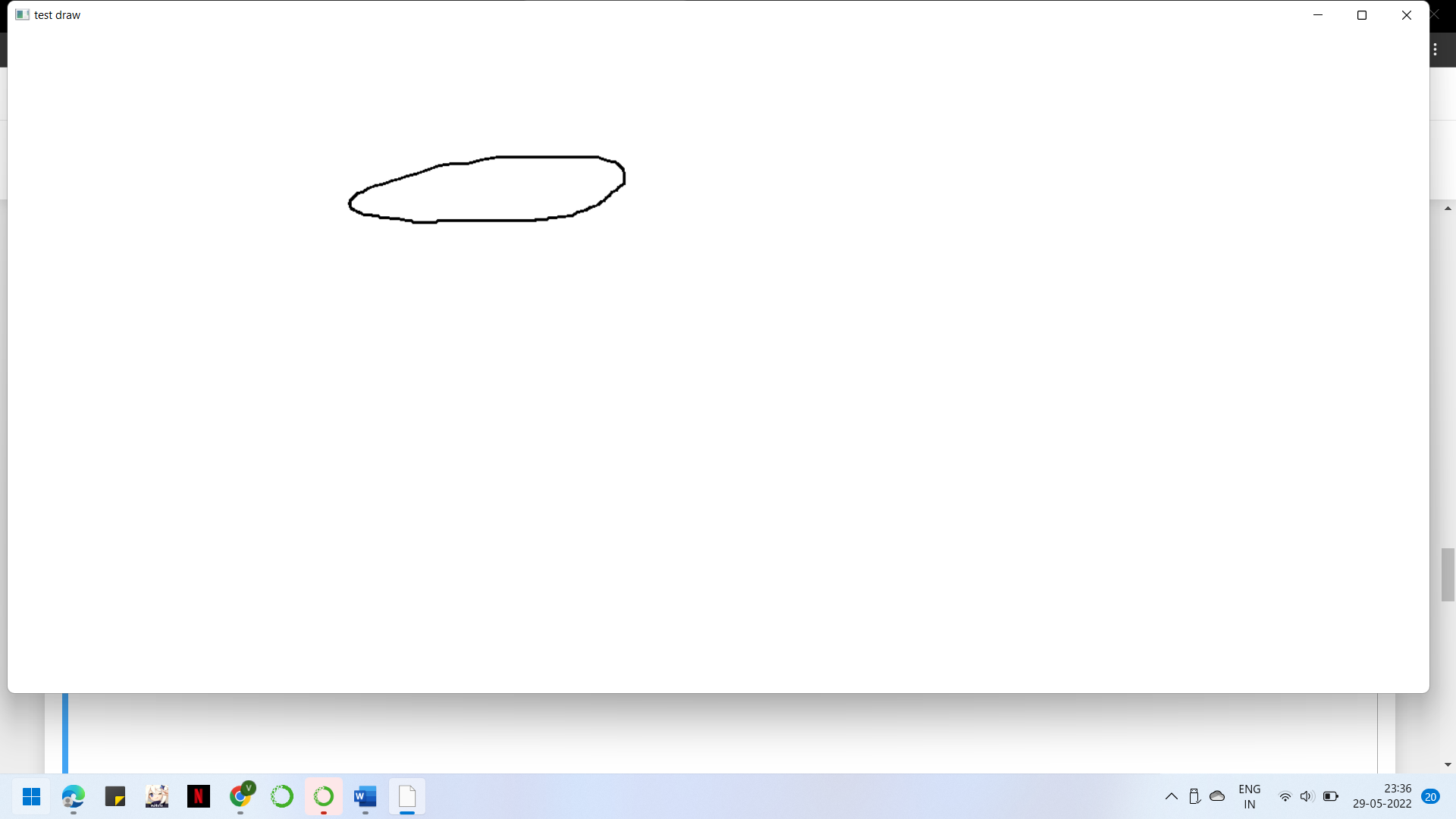
Input:



Output:



Input:



Output:

