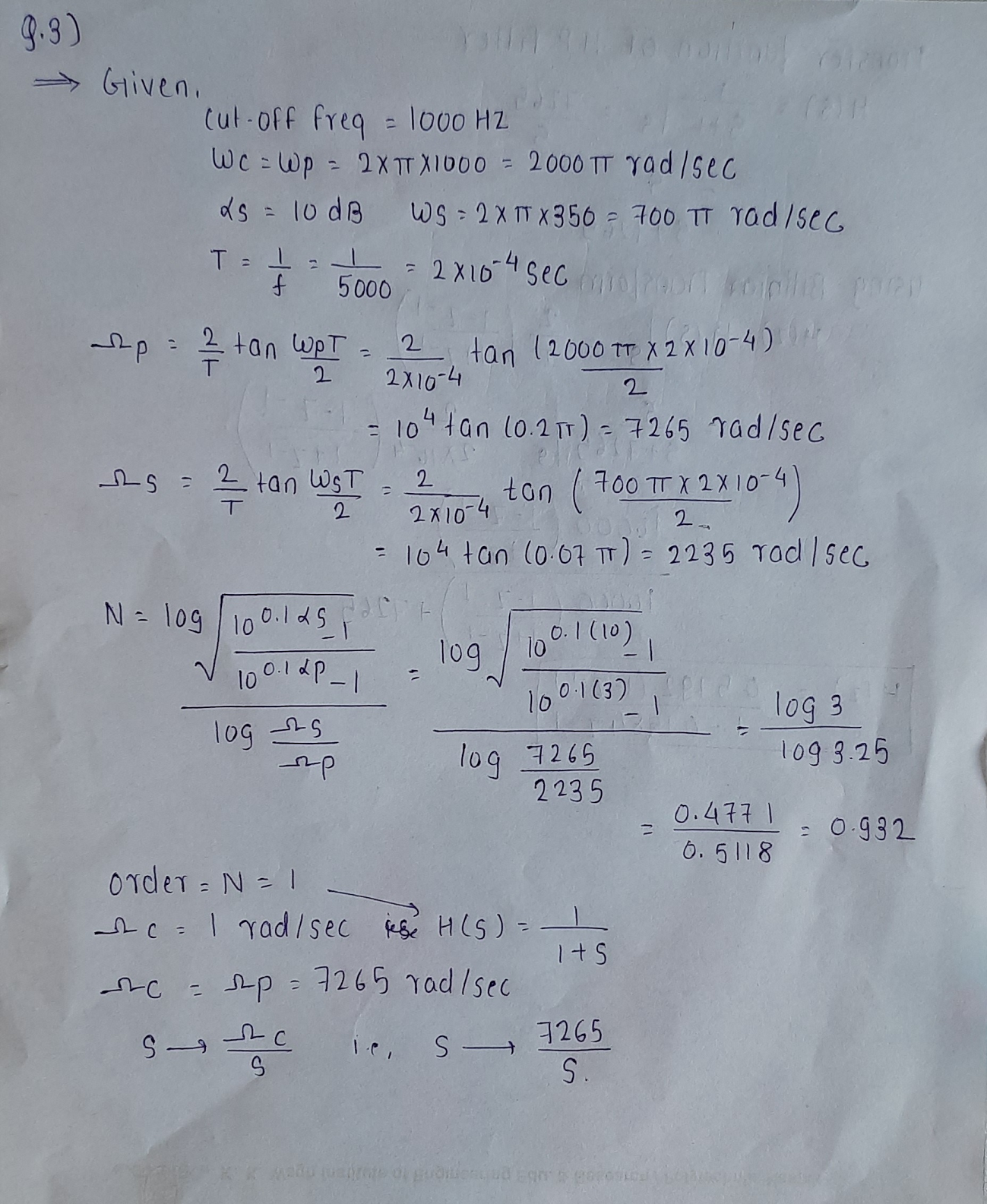
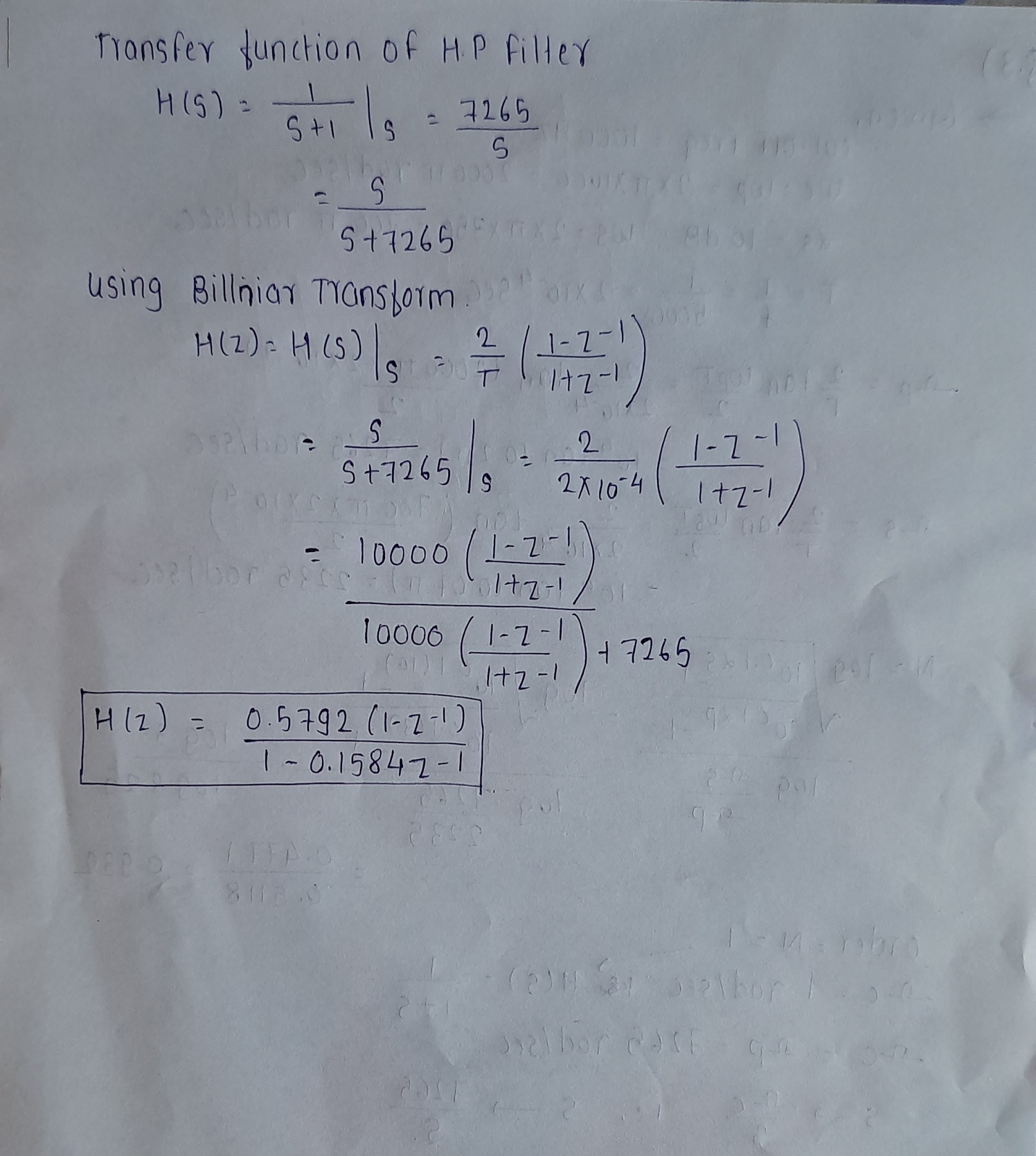
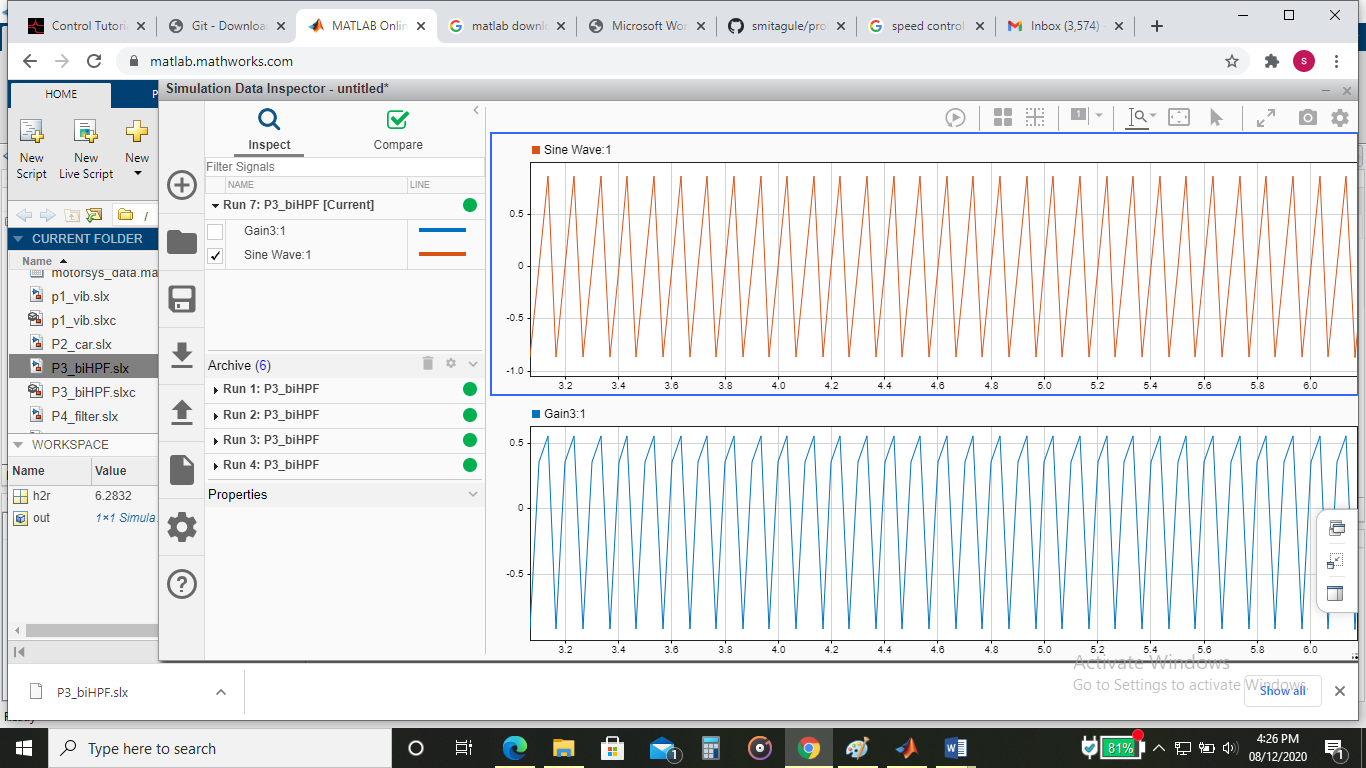
**Problem 3:**

Derivation

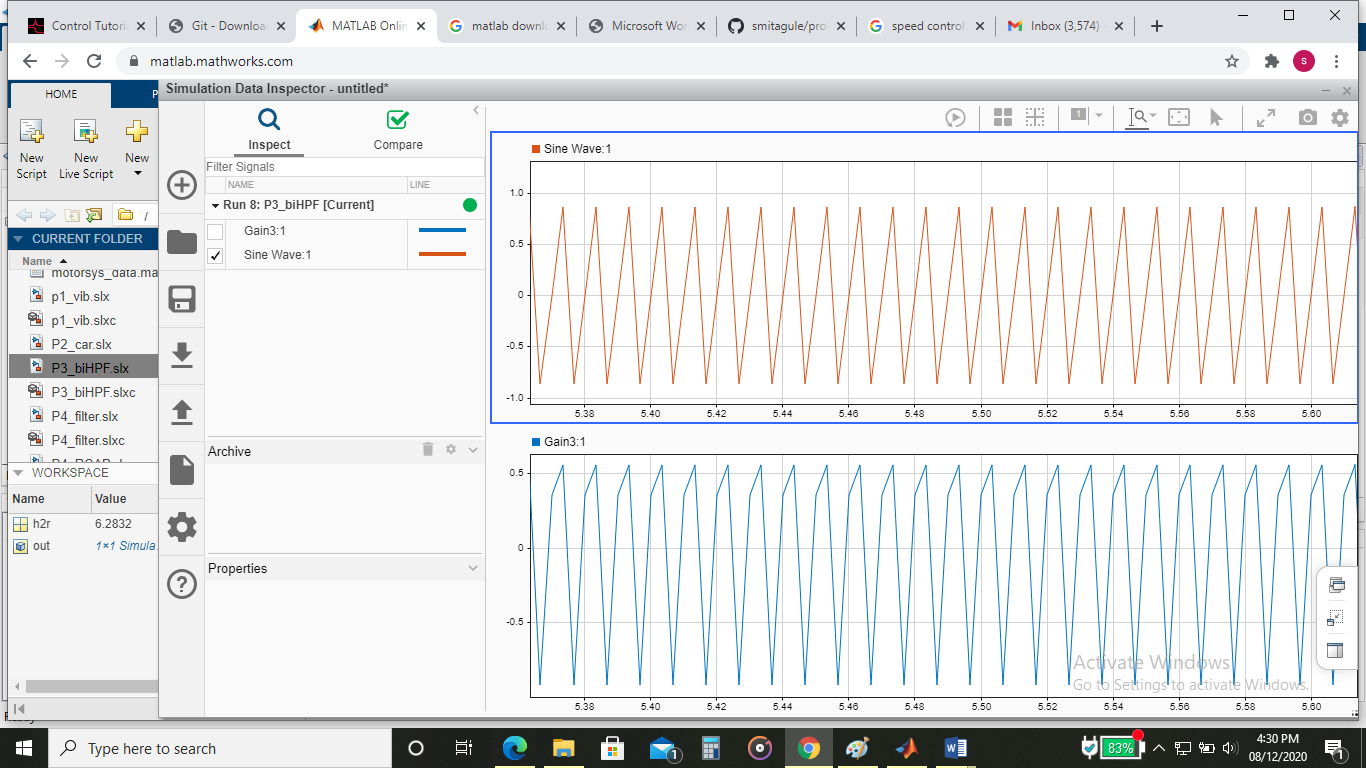




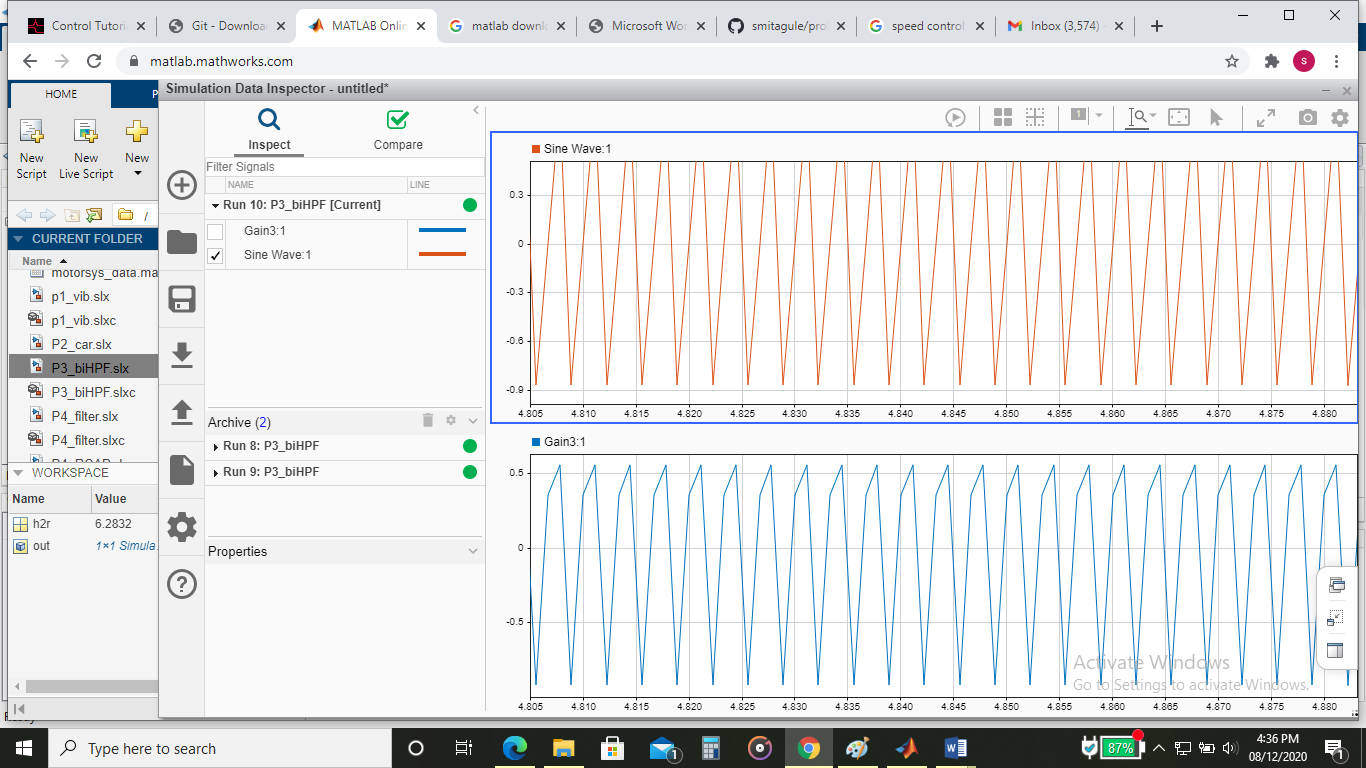
Output for 10HZ:



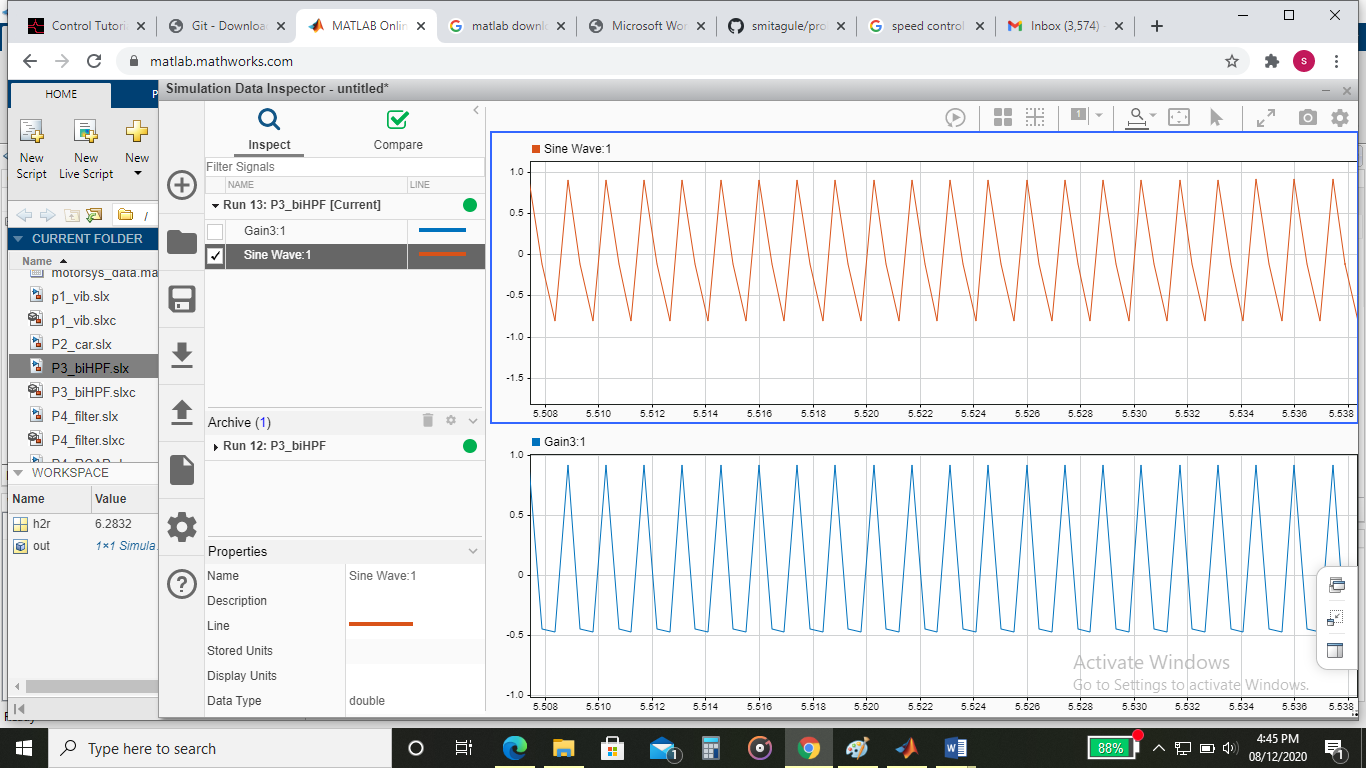
Output for 100HZ:



Output for 300HZ



Output for 700HZ



Output for 1000HZ

