10 pts

Work together in your group but then **each person will turn this in** by the end of today on Gradescope. Include the names of the people from your group.

Write NPDA for the following languages. Be sure to test them on strings in the language and strings not in the language.

1. L={
$$ww^R | w \in \Sigma^+$$
}, $\Sigma = \{a, b\}$, $\Gamma =$

abbaabba

This one you have to do nondeterministically, cannot do deterministically, you cannot find the middle

2. L={
$$ww|w\in \Sigma^*$$
}, $\Sigma=\{a,b\}$, $\Gamma=$

Don't spend too much time thinking about this one because it is impossible