

10 pts

Use JFLAP or pen/pencil to solve the following problem. You may work with 1 or two others for this classwork.

1. Build a TM acceptor for the following language.

$$L = \{ww \mid w \in \Sigma^+\}, \Sigma = \{a, b\}$$

Note that abab is accepted, abbb is not accepted.

2. Give the running time, big-Oh, assuming the  $|w| = n$ .