TOC-Quiz # 2 (Topics: Closure properties of regular languages, Pumping Lemma.)

- 1. Using pumping lemma show that following language is not regular: $\{w\bar{w}|w\in\{0,1\}^+\}.$
- 2. Prove or disprove the following statement:

If L_1 and L_2 are not regular then $L_1 \cup L_2$ is also not regular.