

# Assignment #5

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**Question 1.** For each of the following languages, construct a PDA to accept  $L$ .

(a)  $L = \{a^n b^{2n} \mid n \geq 0\}$

(b)  $L = \{a^i b^j c^k \mid i, j, k \geq 0 \text{ and } i + k = j\}$

(c)  $L = \{w \mid w \text{ has twice as many 0's as 1's}\}$

**Question 2.**

**Question 3.**

**Question 4.**