

CSE205-Assignmnet #2

Due Date 18/3/2019, 13:30

1. Give CFGs that generate the following languages.

a. $\{w \in \{0, 1\}^* \mid w \text{ contains at least three 1s} \}$

b. $\{w \in \{0, 1\}^* \mid \text{the length of } w \text{ is odd and the middle symbol is } 0 \}$

2. Convert the following CFG into an equivalent CFG in Chomsky normal form.

$$S \rightarrow BSB \mid B \mid \varepsilon$$

$$B \rightarrow 00 \mid \varepsilon$$

Notes:

- You should work in groups of 5 students.
- Your solutions should be handwritten.
- Electronic submission is not accepted.