Programming Langauges

Homework 3 (Due date 11.04.2019)

1- Convert the following EBNF to BNF:

 $S \rightarrow A \; [\; b \; \{ \; c \; \} \;]$

 $\mathsf{A} \rightarrow \mathsf{a} (\mathsf{A} \mid \mathsf{a}) \{ \mathsf{S} \}$

2- Convert the following BNF to EBNF:

 $\mathsf{A} \rightarrow \mathsf{A} + \mathsf{S} \mid \mathsf{A} - \mathsf{S} \mid \mathsf{A}^* \mathsf{S} \mid \mathsf{S}$

$$S \rightarrow a+b \mid a-b \mid a*b$$

3- Write a denotational semantics mapping function for the "for" statment in C language. Assume that, Mdec, Mb, Me and MsI Mapping functions are available.