

Assignment 12

Automata & Theory of Computation

Student ID: 2023065350

Name: 권도현

1. Eliminate all useless productions from the grammar

① $S \rightarrow aS \mid \cancel{\emptyset} \mid E,$

② $A \rightarrow aaA \mid b,$

③ $B \rightarrow bbB \mid a,$

~~$C \rightarrow bCD,$~~

④ $D \rightarrow \cancel{\emptyset} \mid \lambda,$

⑤ $E \rightarrow bE \mid \lambda.$

$$S \rightarrow aS \mid E$$

$$E \rightarrow bE \mid \lambda$$

