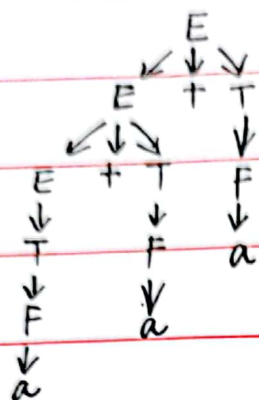




2.1 (c) $E \Rightarrow E+T \Rightarrow E+T+T \Rightarrow T+T+T \Rightarrow F+T+T \Rightarrow F+F+T$
 $\Rightarrow F+F+F \Rightarrow a+F+F \Rightarrow a+a+F \Rightarrow a+a+a$



(b)
 2.4 满足题意的上下文无关文法是 $G = (V, \Sigma, R, S)$

其中 $V = \{S, T\}$, $\Sigma = \{0, 1\}$, $R: S \rightarrow 0T0 \mid 1T1$, S 为起始变元
 $T \rightarrow 0T \mid 1T \mid \epsilon$

2.6 (b) 满足题意的上下文无关文法是 $G = (V, \Sigma, R, S)$

其中 $V = \{S, T\}$, $\Sigma = \{a, b\}$, $R: S \rightarrow aSb \mid Ta \mid bT$, S 为起始变元
 $T \rightarrow bT \mid Ta \mid \epsilon$

设起始变元为 A

2.14 $A_0 \rightarrow A$
 $A \rightarrow BAB \mid B \mid BB \Rightarrow A \rightarrow BAB \mid B \mid BB \mid BA \mid AB$
 $B \rightarrow 00 \mid \epsilon \quad B \rightarrow 00$

$A_0 \rightarrow BAB \mid DD \mid BB \mid BA \mid AB \mid \epsilon$
 $\Rightarrow A \rightarrow BAB \mid 00 \mid BB \mid BA \mid AB$
 $B \rightarrow 00$
 $A_0 \rightarrow BAB \mid C \mid DD \mid BB \mid BA \mid AB \mid \epsilon$
 $\Rightarrow A \rightarrow BC \mid DD \mid BB \mid BA \mid AB$
 $B \rightarrow DD$
 $C \rightarrow AB$
 $D \rightarrow 0$

