TUGAS 02

Soal 2 sub bab 3.3 dari buku 3. Peter Linz hal 99

S→ abS|A

A→ baB

B→ aA|bb

Construct a dfa

- S → abS abA abbaB abbaaA aabbaabaB aabbaababb
- S → abS abA abbaB abbabb
- S → A baB babb
- S → A baB baaA baabaB baababb

Soal 4 dari buku 1. Eugene Xavier hal 151

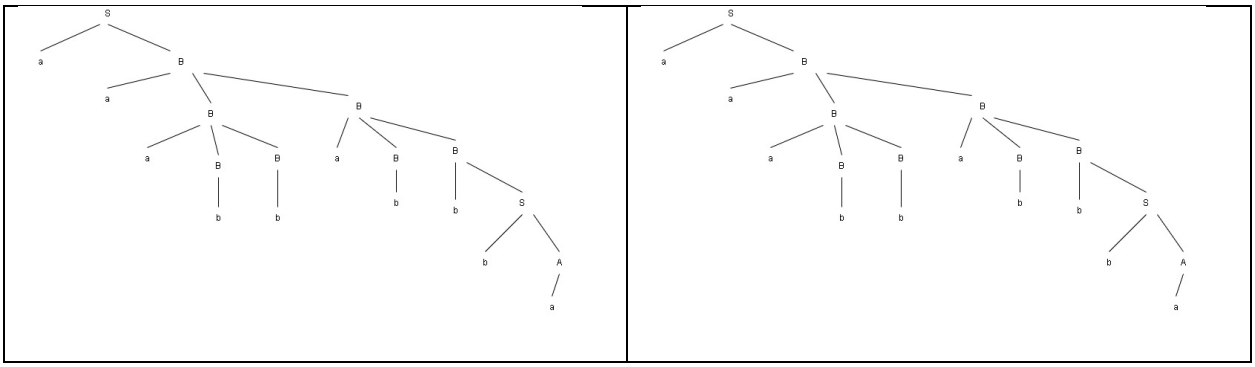
S → aB | bA,

A → a | aS | bAA

B → b | bS | aBB.

String aaabbabbba

Lestmost derivation		**Rightmost derivation**	
aB	S→aB	aB	S→aB
aaBB	B → aBB	aaBB	B → aBB
aaaBBB	B → aBB	aaBaBB	B→aBB
aaabBB	B→b	aaBaBbS	B→bS
aaabbB	B→b	aaBaBbbA	S→bA
aaabbaBB	B → aBB	aaBaBbba	A→a
aaabbabB	B→b	aaBabbba	B→b
aaabbabbS	b→bS	aaaBBabbba	B→aBB
aaabbabbbA	S→bA	aaabBabbba	B→b
aaabbabbba	A→a	aaabbabbba	B→b
Phrase tree		**Phrase Tree**	



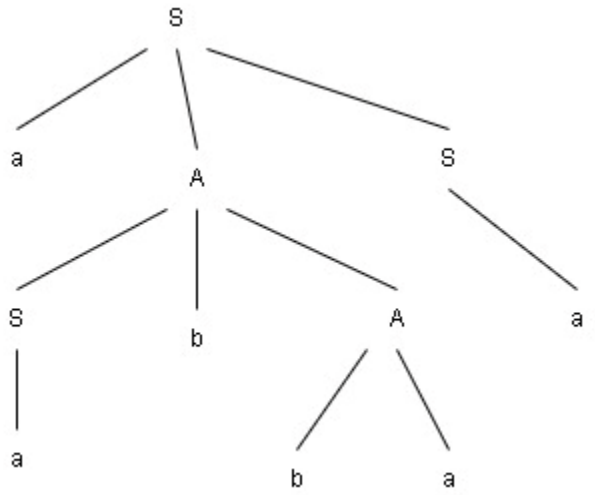
Soal 10 dari buku 1. Eugene Xavier hal 151

S → aAS | a

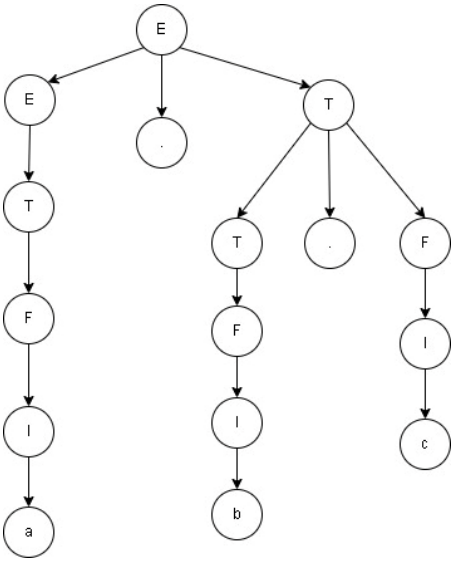
A → SbA | SS | ba

String aabbaa

aAS	S→aAS
aSbAS	A→SbA
aabAS	S→a
aabbaS	A→ba
aabbaa	S→a



Soal 19 dari buku 1. Eugene Xavier hal 151



Soal 22 dari buku 1. Eugene Xavier hal 151

S → AaB |aaB

A → λ

B → bbA | λ

Eliminate all λ-productions

- S → aB | aaB

  B → bba | λ
- S → aB | aaB

  B → bb
- S → aB | aaB | a | aa

  B→ bb
- S → abb | aabb | a | aa

Soal 4.28 dari buku 2. JC Martin hal 158

S → abA | bB | aba

A → b | aB | bA

B → aB | aA

Draw NFA accepting language