

Tugas Akhir OTomata

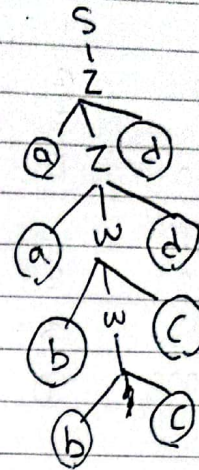
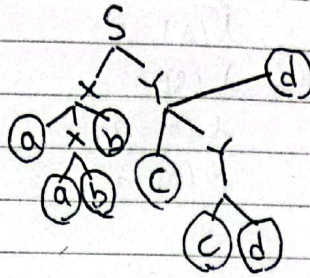
Nama : Karsal Agusfajar G

NIM : A11.2022.14320

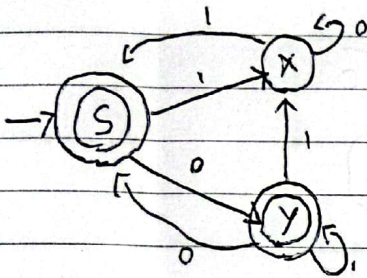
1.)



karena lebih dr Satu
tree berarti Ambigu



2.)



$V = \{S, X, Y\}$

$T = \{0, 1\}$

$S = S$

$P = \{S \rightarrow 1X | 0Y | \epsilon, X \rightarrow 0X | 1S, Y \rightarrow 1X | 0S | 1\}$

$X \rightarrow 0X | 1S$

$Y \rightarrow 1X | 0S | 1$

3.)

$S \rightarrow XY$

$X \rightarrow aX | abY | aZa$

$Y \rightarrow bX | YYY | \epsilon$

$Z \rightarrow \epsilon$

$W \rightarrow dY | YZY$

1) hilangkan $Z \rightarrow \epsilon$

$S \rightarrow XXY$

$X \rightarrow aX | abY | aZa$

$Y \rightarrow bX | YYY | \epsilon$

$W \rightarrow dY | YZY$

2) hilangkan $Y \rightarrow \epsilon$

~~$S \rightarrow XY$~~

~~$X \rightarrow aX | abY | aZa$~~

~~$Y \rightarrow bX | YYY | \epsilon$~~

$S \rightarrow XXY$

$X \rightarrow aX | abY | aZa$

$Y \rightarrow bX | YYY$

$W \rightarrow dY | YZY$

3 hilangkan produksi unit ($S \rightarrow X, W \rightarrow Y, Y$)

$S \rightarrow aX | abY | aZa$

$X \rightarrow aX | abY | aZa$

$Y \rightarrow bX | YYY$

$W \rightarrow dY | YZY$

4 hilangkan produksi useless

$S \rightarrow aX | abY | aZa$

$X \rightarrow aX | abY | aZa$

$Y \rightarrow bX | YYY$

Decimal	biner	mod 4
---------	-------	-------

0	0	0
---	---	---

1	1	1
---	---	---

2	10	2
---	----	---

3	11	3
---	----	---

4	100	0
---	-----	---

5	101	1
---	-----	---

6	110	2
---	-----	---

7	111	3
---	-----	---

8	1000	0
---	------	---

$Q = \{A, B, C, D\}$

$S = A$

$\lambda(A) = 0$

$\lambda(B) = 1$

$\lambda(C) = 2$

$\lambda(D) = 3$

$\Sigma = \{0, 1\}$

$\Delta = \{0, 1, 2, 3\}$

