Nama: MIFTAKHUDDIN FALAKI A0 430 80 ES MPM: 201843501551 · 28 - 7 O.C.29, O. A.29 Kelas: R5W NOHP: 083807303926 5-2 ASA (- ? 1. Lakukan Penghilang Rekursit kiri pada tata bahasa bebas kontek bonikut: a. S -> ASd | Scb | BSd | Sae 200 60 5 - ASBEL | PSBEL A -> Ade | bAe | Abb | a B > 6Bb | Bac | Bak 2, 7 cb, ac 21-7 (621) 0821 1) Pisahkan aturan Produksi yang Pekursif kni 22-7 26, 66 5 -> Scb / Sae A -> Ade | Abb 21 -9 delle, bolle B -> Bac BaA 25-3 O.C. O.A Simbol 5: d,= Cb, dz=ae Simbol A i di=de, de=bb Simbol B: L, = ac, Lz = aA b. P - ode (189 all P Bad | pod | od De D * aturan young tidak revursir kiri 710/036/659 + 3 S-> ASd | BSd A > bAe a B -> 686 199 91270457 purt nonder ray/16299 (1 No7 F 9 Simbol S: B, = ASd, B2 = BSd 10 -Simbol A: B. . bAe, B2 = a Simbol B: B, = 686 do = , to : 9 louine? 2) Lakukeun Persantian aturan Produksi Sung Pekussif kiri 5-> Scb | Sae 1). 5 -> ASdZ, | BSdZ, 21-7 cb, ae 1 1/2 pm 100 % 2, 7 cbz, acz, A-> Adel Abb 291 000 1). A -> bAeZelazo 22 -> de, bb z2 -> dez2. bbz2 (KKY)

23 -) ac, aA 23 - ac23, aA23

MAD

3) Hasil akhir aturan Produksi Setelah penghilungan rekursir kini

Warra : MAPTAK HUDDIN FALAKI

2021 620 1 620 1 520 cm

olydalsadas A

302 / 602 5 2

ddA shA & A

Bad Sad Ed

1979 970 that of alabel pourt notates 4

A Sho CA

628 162A G-D

Sombel B: B: 666

C-2 Seb | Sag

A081208128188

12210251-8/15 : 194

5 -> ASd | BSd A > bAe la med de la manda de

B -> 6Bb

5 9 ASdZ1 | bSdZ1

zi -> cb, ae

21-> cb21, ae21

A -> BAEZ2 \ a22

22-> de, bb

21 -> de22, bb22

B -> bBb23

23-7 ac, aA

23-7 acZ3, aAZ3

1 1 1 1 1 A Leaver Anosad & de a de la declara

b. P -> Pab IrPq laQP a > Qbc | bQa | bFa R> Red 1 dRb labR

1) Pisahkan aturan Yang rekursif kari

P-7 Pab

Q-7 Qbc128 = 9 12A = 18 12dpg

R-9 RCd 10 . A Johns

Simbol P: d, = ab Simbol Qui di a be Simbol R: Lica

* aturan Jung tidak rekursit kiri

P-> rea lage

Q > bQa | bRQ

R > 1Rb labR - A.

Simbol P: B,= 1P9, Bz 2 aQP Q: B: = bQa, B2 = bRQ Smbol R: B, = dRb, B2 = abR Simbol

1). 5-2 ASLZ, [B5222,

2) lakukun Pengentran aturan Produksi Yang Tekursuk Kiri P -> Pab

1). P-> rPQZ1 / aQPZ1

2,-2 06

zi - abzi

Q > Qbc

1) Q -> 6@aZ2 1 6PQZ2

22-7 bc

22-7 bc22

R-7 Red

1) R-> dRbZ3] abRZ3

23-9 6

23 -> cd23

3.) hasil akhir aturan Pooduksi Setelah penghilangan rekursi F kiri

P -> 189 | aQP

Q -> bQa 1 bRQ

2 > 226 | abr

P = TPQ21 1 aQPZ1

2. - ah

2, -> ab2,

Q-> baa21 | bra22

22 -> bc

Z2-7 bC22

R= dr623 | abr23

23-2 6

23-7 cd 23

Ubahlah tata bahasa Kontek beriket Kedermbentuk BNC: S-> CBA JaE 15B A> AB | Eg | BAa B -> aDB 16AA 166 C-> CC | bC | DC 177e 1) atur Produksi yang sulah dalam bentuk normal Chamsky A+> AB (-> DC 0-1e 2) Lakoken Pergontian aturan Produter Yang belum bentuk normal Chamsky 5 -> cBA => 5 -> PIBA 5 -> PIP2 5-> aE => 5-> P3 E 5 -9 5B => 5 -> P4B 8 But 4 A-> (g=) A -> (P5 A >> BAO => A -> BAP3 A -> P2 P3 B 7 aDB => B -> B3 DB B - 9 P3 P6 8-76AA => 8-> PTAA B-> P7 P8 B-> bb => B-> P7 P7 (-> CC => C-> PIC C-> bC=> C-> P7C 3) Terbentuk aturan Produksi dan Simbol Naviabel baru: P1 -> C P2 -> BA P3 -7 a P4 -9 5 P6 -> DB P7 -> 6 AA (-89 Pg >> bb

9) Hasil akhir aturan dalam bontuk normal Chamesay

	and the second second			
Α.	- AB	B->8386	Maria about the part the party.	
	70c	B-> 87 P8	Man Day A. L. Const.	
0	→ e	B -> 87 P7	ARRIANT MA CA	
	-> PIP2	C-7 PIC	Idd I had I leve to the	
	-> P3E	C-> P7C	1961 Day 6 Day	
	-> P4B			
	-> C85			
A	-> P2 P3	TOUT MANAGE TO THE MANAGE	the state of marginal rests ("	
			2 A 4 1 3 A	

3. Buat BNG Pada tata bahasa bebas kenteks benikut Ini:

a. S → Pa

P → QS | r | 9a

p-> Q5 | r | 90 Q-> SP | 9 | P

* Lakuken Pergantian aturan Produksi ya belum bentuk normal Chamiky

P-> qa => P-> Pi a

P-> Pi P2

+ BNG

A LANGUE TO THE REAL PROPERTY OF THE PARTY O

5-7 PQ P-7 Q5 | r | P2P2 Q-9 SP 19 | P

* Tentukan urutan Sambol Variabel
S. P. Q

(5< 940

* Priksa aturan Praditsi alakan Sulah memenuhi urutan Varrabel

S -> PQ (S < P memehuhi)

P -> QS (P < Q memehuhi)

Q -> SP (Q > S + idat memenuhi)

* Subtitusi Pada Simbol Variabel Gang belum menurhini unuten:

Q -> SP => Q -> PQP -> Q SQP / TQP / PRQP | 9 |

+ untok Q → QSQP | PARQP Lakukun Panaylidangun Pekursif Krii Q→ rQP2, 1921 | P21 Z, → SQP, PaQP Z, → SQP2, PaQP2,

Q-> rapz, 1921/ P21/19P/9/1P



* lakelen Subtitusi munder Pada Produtesi Yung belum BNG

P -> QS -> P -> FQP215 | 9215 | FQP5 | QS | FS | FIP2

S -> PQ => S -> FQP215Q | 9215Q | P215Q | FQP5Q | 95Q | FS Q | FQ

P1P2Q

* Subtitus; Pada aturan huru

21-> 500=>21-> 100215000 | 4215000 | P215000 | rapsace | 45000

FIRE MALE

2, -> 50PZ, => 2, -> rapz, saapz, | qz, saapz, | Pz, saapz, | rapsaapz, | raps

* hasin akhir aturan Produksi yung sudah dalam bentuk BAIG:
S-9 rapzisa 19215Q1 P2,5Q1 rapsa 1 95Q1 rsa 1 ral
P-7 rapzis 1 02151 P2,5 1 raps 1 q5 115

Q -> rapzilgzil Pzilrap 1911

217 rap21500p1 421500p1 p21560p1 rap500p1 9500p

21-> rapzis aapzi | azis aapzi | pzisaapzi | rapsaapzi | rapsaapzi | proapzi | rapsaapzi | apzi



$$3.6.5 \rightarrow BC$$

$$A \rightarrow AD$$

$$B \rightarrow cld$$

$$C \rightarrow AB$$

$$D \rightarrow alb$$

* Lakukn Penghulan Tekursia kiri

A -> AD -> A -> ADD

Simbol A:
$$\angle i = DD$$

A \Rightarrow ADD

A \Rightarrow 21

Z1 \Rightarrow DD

21 \Rightarrow DDZ,

* tentukun vrutan Simbol Variabel

S.A.B.C.D

(SCACB,C.D)

* Priksa atmon Produky: alatati Siden Menerici: vruten Venerich!

S -> BC (S < B monumumi)

C-> AB (C>A + dak memerum)

* laketen Subtitusi Rada Smibol vou Jug blm mynnemini urutan:

C-> AB => C-> Z1B=> C-> DDZ1=> C-> apo Z1 1 b DDZ1

* Lakevern subtitus: mundur

A > ZD => A > DD Z, => B DZ, D 1 b DZ, D

S -> Qx => B -> CC / dC

* Substitusi Pada aduran baru

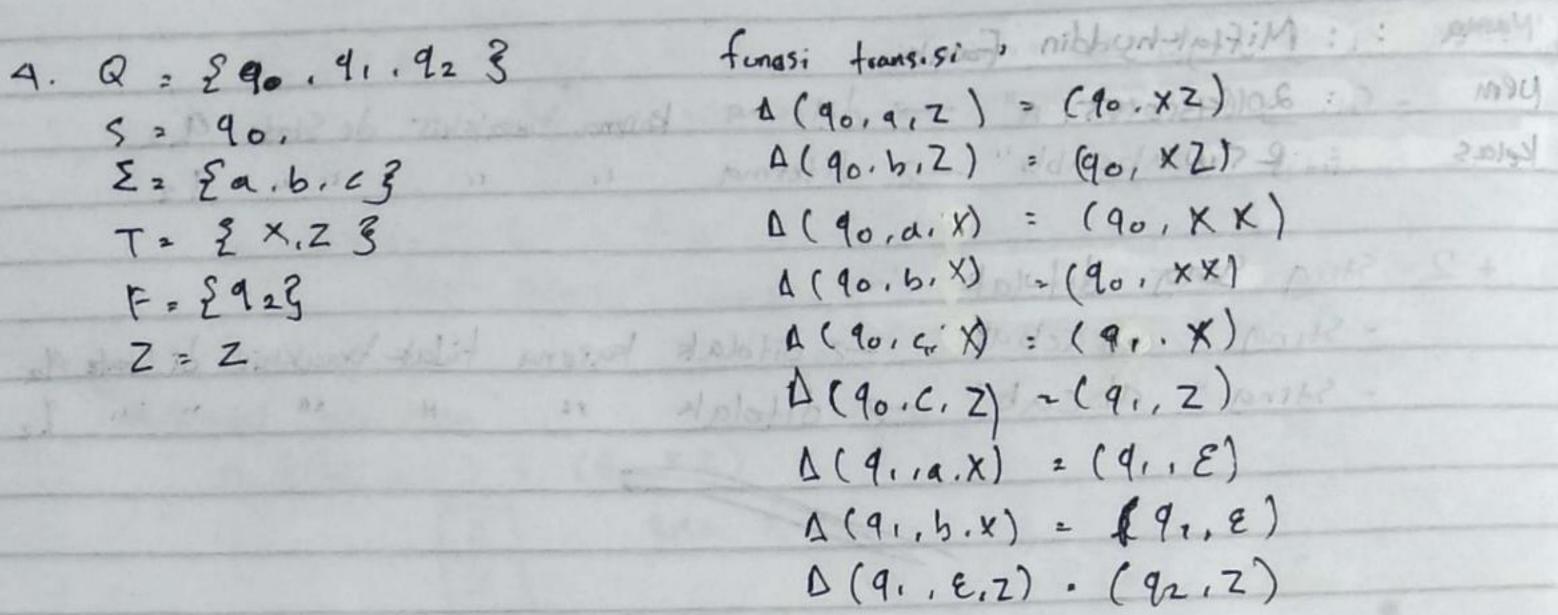
2, → DD ⇒ Z, → aD | bD

2, → DD21=>2, → aD2, | bDZ,

* hasil akuir $S \rightarrow cC \mid dC$ $D \rightarrow d \mid b$ $A \rightarrow aD2,D \mid bD2,D$ $C \rightarrow aD2,1bD2,$ $C \rightarrow aD2,1bD2,$

4.
$$Q = 290.91.923$$

 $5 = 90.$
 $\Sigma = 20.6.63$
 $T = 2 \times .Z3$
 $F = 2923$
 $Z = Z$



a. * String "abca" dan abcab"

1). Konfigurasiawas. Stato 2 90 / Top Stack: 7 : membaca Input ex 1 (90, a, Z) = (90, KZ)

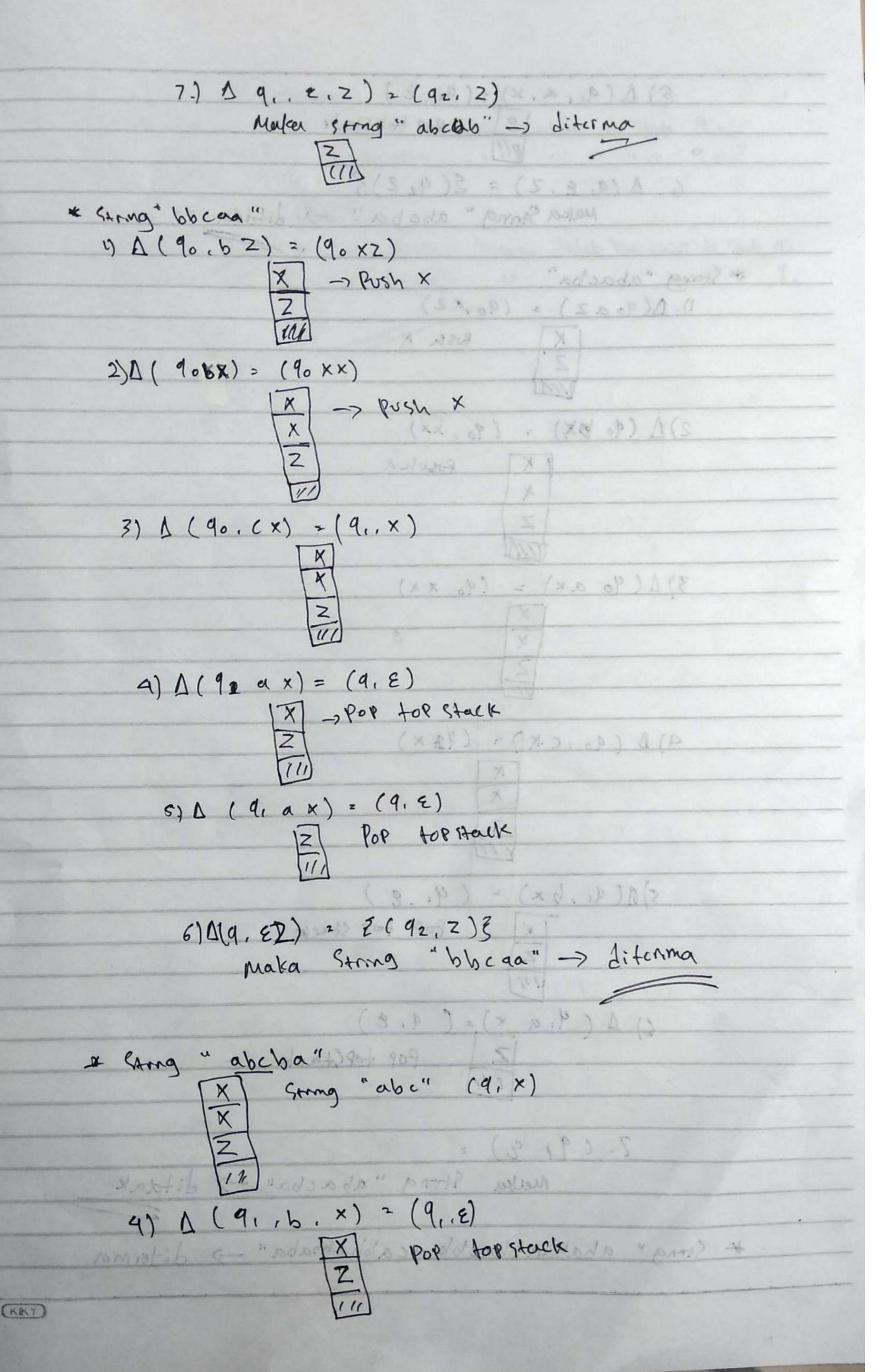
Konfigurasi mesin menjadi State 90, Posh X

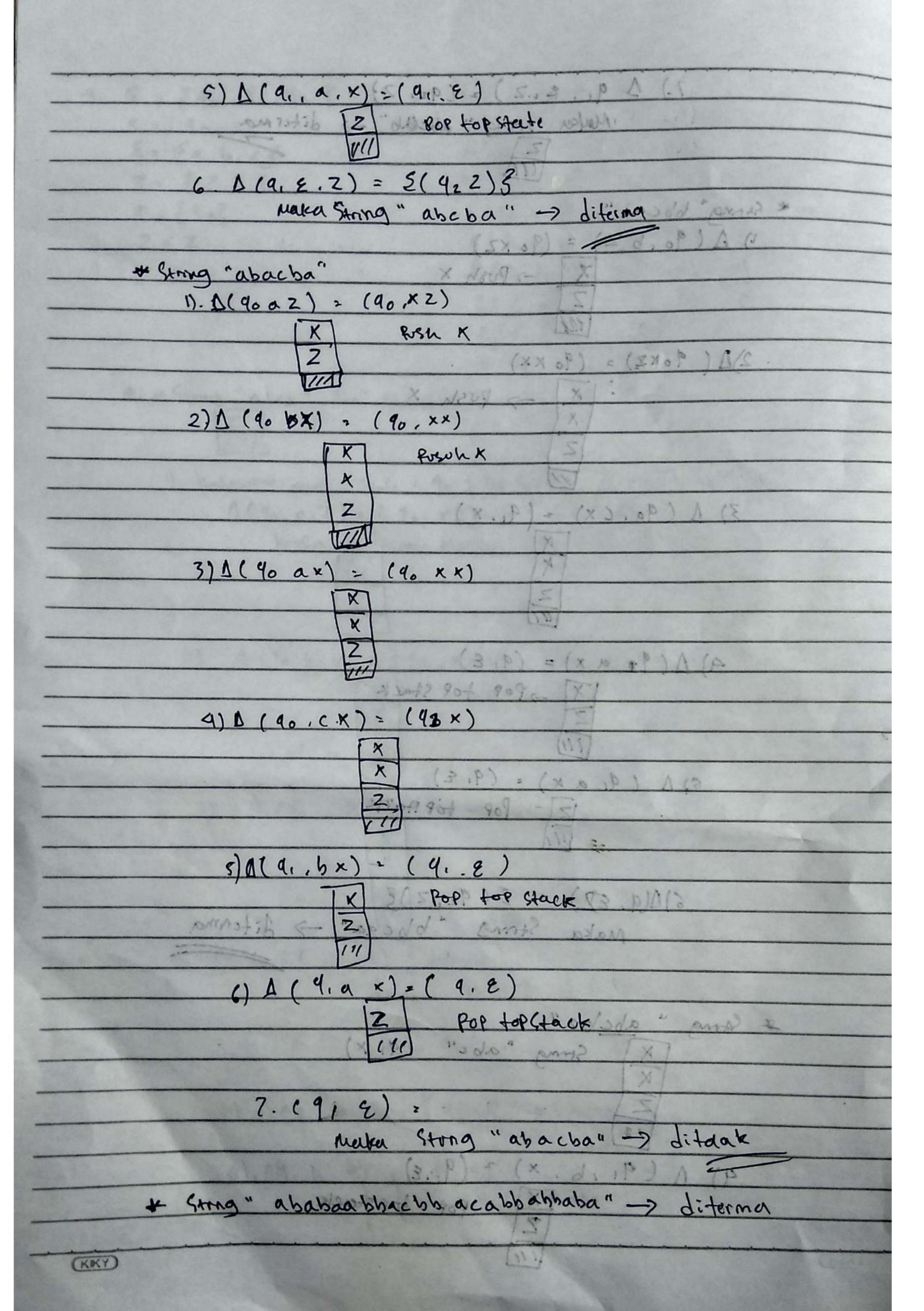
2)- 1 (90,b,x) = (10,xx) Push X

3). D (90.CX) = (1, x)

4). A (9,,a,x) = (9,,E) State 9, Pop top Stack

c) A(a, e, x)= "abcu" > ditolak 61.09, b, x) = (9,, E) por top state





b. +2 String Lathya Yang diterma A. Q = 89. 41. 92 3 - String " bbcaage -> diterma Karma broakhir di Stato 92 - Stora "abcabb" -> ditorma " 3 sudu = 9 2 3 D(40,000) = (90, KK) + 2 Strong lamager Junglettolak - Strng " ab acbab" --> ditolak karena tidak borakniv di Sterte 92 - string " abcab" -> ditolak " (3.1) . (x.x.1) A (5,2). (5,3,1P) "doods" asts" asts" shorts " . A 1). Yourselvison is to stone of the proposition of the proposition of (5x ,0)) = (5,0,0)) Konfigurasi mess mensodi state 16. Posh x 2). A (90, b. K) . (10, KX) State KUSW X 5). P(90.6x)=(1, x) 9) A (9, a, x) = (9, E) State 1, 100 top 1000 e) A(Q, E, X)= " aboc " = ditolole (x, d, B) . (3) 9+10+8 861+8 99 233 (KKY)