CFG to PDA
Conversion & Implementation

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CFG

S → XADBDBX

A → * | / | + | -

B → XADBDBX | (XADBDBX)

B → 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | BB

C → 0|1|2|3|4|5|6|7|8|9|CC

D → _ | DD

X → D | ∈

CNF

S → EF | JK

A → * | / | + | -

B → EF | LM | JK | NT

B → 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | BB

C → AD

D → _ | DD

E → CB

F → DB

G → (

H →)

J → DE

K → FD

L → GE

M → FH

N → GJ

T → KH

GNF

S → *DBF | /DBF | +DBF | -DBF | _VEK | _EK

A → *|+|-|/|[spasi]A|*D|+D|-D|/D|[spasi]Y

B → *DBFW | /DBFW | +DBFW | -DBFW | (EMW | _VEKW | _EKW | (JTW | *DBF | /DBF | +DBF | -DBF | (EM | _VEK | _EK | (JT | 0W | 1W | 2W | 3W | 4W | 5W | 6W | 7W | 8W | 9W | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9

W → *DBFW | /DBFW | +DBFW | -DBFW | (EMW | _VEKW | _EKW | (JTW | *DBF | /DBF | +DBF | -DBF | (EM | _VEK | _EK | (JT | 0W | 1W | 2W | 3W | 4W | 5W | 6W | 7W | 8W | 9W | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9| *DBFWW | /DBFWW | +DBFWW | -DBFWW | (EMWW | _VEKWW | _EKWW | (JTWW | 0WW | 1WW | 2WW | 3WW | 4WW | 5WW | 6WW | 7WW | 8WW | 9WW

D → _V | _

V → _VV | _V | _

E → *DB | /DB | +DB | -DB

F → _VB | _B

H →)

J → _VE | _E

K → _VBD | _BD

M → _VBH | _BH

T → _VBDH | _BDH

PDA

$\delta(q, \varepsilon, S) = \{(q, *DBF), (q, /DBF), (q, +DBF), (q, -DBF), (q, \_VEK), (q, \_EK)\}$

$\delta(q, \varepsilon, B) = \{(q, *DBFW), (q, /DBFW), (q, +DBFW), (q, -DBFW), (q, (EMW), (q, \_VEKW), (q, \_EKW), (q, (JTW), (q, *DBF), (q, /DBF), (q, +DBF), (q, -DBF), (q, \_VEK), (q, \_EK), (q, (JT), (q, 0W), (q, 1W), (q, 2W), (q, 3W), (q, 4W), (q, 5W), (q, 6W), (q, 7W), (q, 8W), (q, 9W), (q, 0), (q, 1), (q, 2), (q, 3), (q, 4), (q, 5), (q, 6), (q, 7), (q, 8), (q, 9) \}$

$\delta(q,\varepsilon, W) = \{(q, *DBFW), (q, /DBFW), (q, +DBFW), (q, -DBFW), (q, (EMW), (q, \_VEKW), (q, \_EKW), (q, (JTW), (q, *DBF), (q, /DBF), (q, +DBF), (q, -DBF), (q, \_VEK), (q, \_EK), (q, (JT), (q, 0W), (q, 1W), (q, 2W), (q, 3W), (q, 4W), (q, 5W), (q, 6W), (q, 7W), (q, 8W), (q, 9W), (q, 0), (q, 1), (q, 2), (q, 3), (q, 4), (q, 5), (q, 6), (q, 7), (q, 8), (q, 9) \}$

$\delta(q, \varepsilon, D) = \{ (q, \_V), (q, \_)\}$

$\delta(q, \varepsilon, V) = \{ (q, \_VV), (q, \_V), (q, \_)\}$

$\delta(q, \varepsilon, E) = \{(q, *DB), (q, /DB), (q,+DB), (q,-DB)\}$

$\delta(q, \varepsilon, F) = \{(q, \_VB), (q, \_B)\}$

PDA

$\delta(q, \varepsilon, H) = \{(q,))\}$

$\delta(q, \varepsilon, J) = \{(q, \_VE), (q, \_E)\}$

$\delta(q, \varepsilon, K) = \{(q, \_VBD), (q, \_BD)\}$

$\delta(q, \varepsilon, M) = \{(q, \_VBH), (q, \_BH)\}$

$\delta(q, \varepsilon, T) = \{(q, \_VBDH), (q, \_BDH)\}$

$\delta(q, 0, 0) = (q, \varepsilon)$

$\delta(q, 1, 1) = (q, \varepsilon)$

$\delta(q, 2, 2) = (q, \varepsilon)$

$\delta(q, 3, 3) = (q, \varepsilon)$

$\delta(q, 4, 4) = (q, \varepsilon)$

$\delta(q, 5, 5) = (q, \varepsilon)$

$\delta(q, 6, 6) = (q, \varepsilon)$

$\delta(q, 7, 7) = (q, \varepsilon)$

$\delta(q, 8, 8) = (q, \varepsilon)$

$\delta(q, 9, 9) = (q, \varepsilon)$

$\delta(q, *, 8) = (q, \varepsilon)$

$\delta(q, /, /) = (q, \varepsilon)$

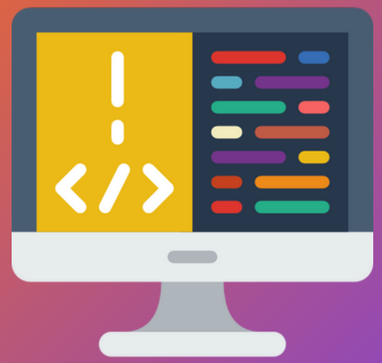
$\delta(q, +, +) = (q, \varepsilon)$

$\delta(q, -, -) = (q, \varepsilon)$

$\delta(q, \_, \_) = (q, \varepsilon)$

$\delta(q,),)) = (q, \varepsilon)$

$\delta(q, (, () = (q, \varepsilon)$



Go to code!

Thank You