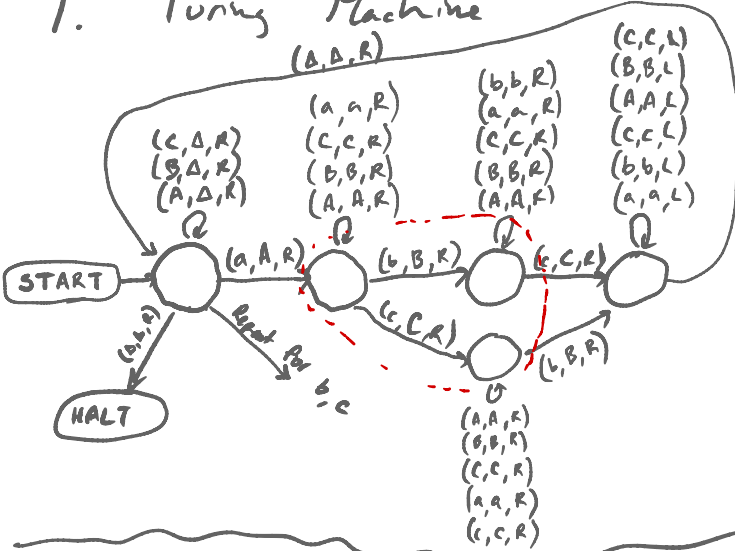


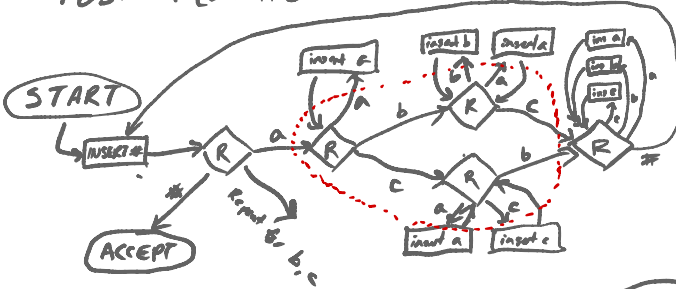
1. Turing Machine

HW 11

CSCI 340

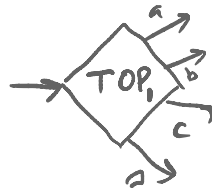


Post Machine

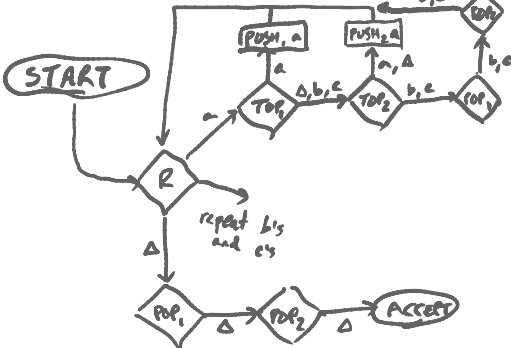
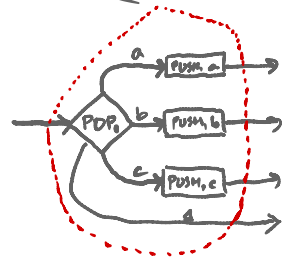


ZPDA

Create a new building block, TOP



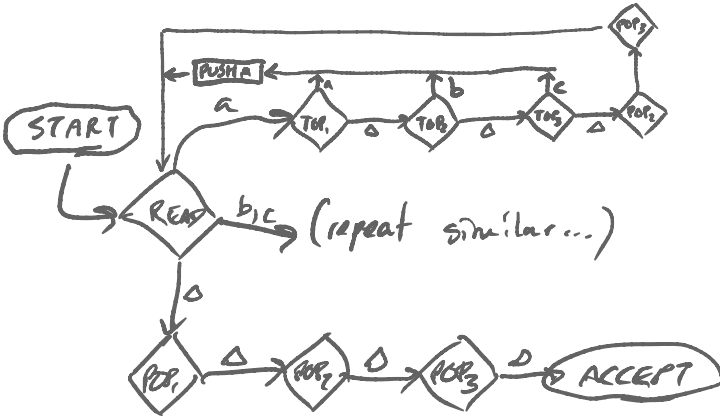
≡



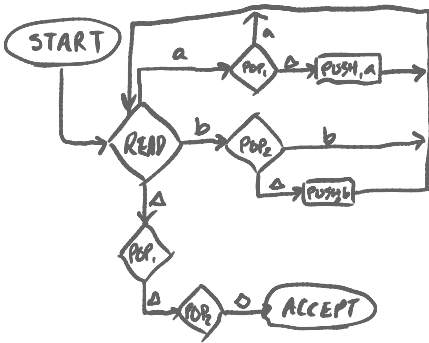
3PDA

(using "TOP")

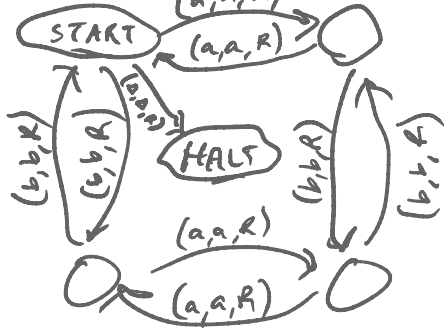
Stack 1 - a's
Stack 2 - b's
Stack 3 - c's



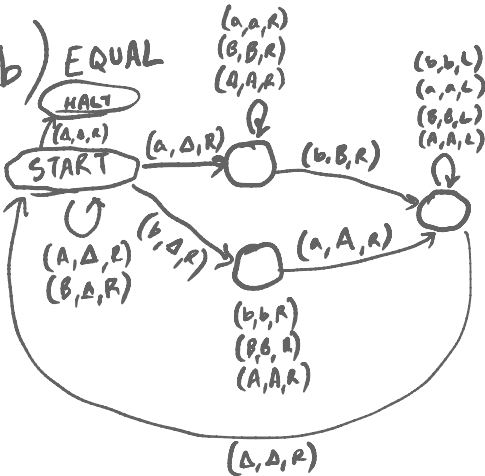
2)



3a) EVEN-EVEN



3b) EQUAL



4a) a b aa b bb ba b
 $\underbrace{\quad}$ $\underbrace{\quad}$ $\underbrace{\quad}$ $\underbrace{\quad}$ $\underbrace{\quad}$
 1 2 # Δ R

Read # when
 $\Sigma = \{a, b\} \therefore$

ALAN



4b) a b aaa b aa ab b | aaa b aa b ab bb b
 $\underbrace{\quad}$ $\underbrace{\quad}$ $\underbrace{\quad}$ $\underbrace{\quad}$ $\underbrace{\quad}$ | $\underbrace{\quad}$ $\underbrace{\quad}$ $\underbrace{\quad}$ $\underbrace{\quad}$ $\underbrace{\quad}$
 1 3 a b R 3 2 b # R

Starts w/ ab \therefore

MATHISON



4c) a b aaa b aa ab a | aaa b aa b ab ba b
 $\underbrace{\quad}$ $\underbrace{\quad}$ $\underbrace{\quad}$ $\underbrace{\quad}$ $\underbrace{\quad}$ | $\underbrace{\quad}$ $\underbrace{\quad}$ $\underbrace{\quad}$ $\underbrace{\quad}$ $\underbrace{\quad}$
 1 3 a b L 3 2 a Δ R

Always crashes \therefore

ALAN

