

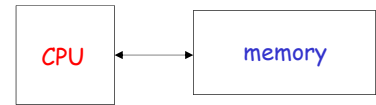
CS154

Models of Computation

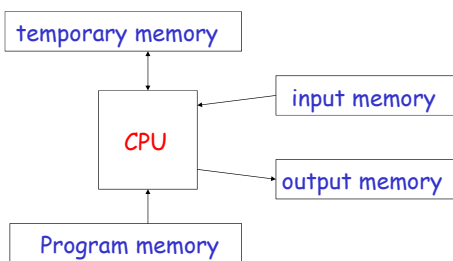
class 0

1

Computation

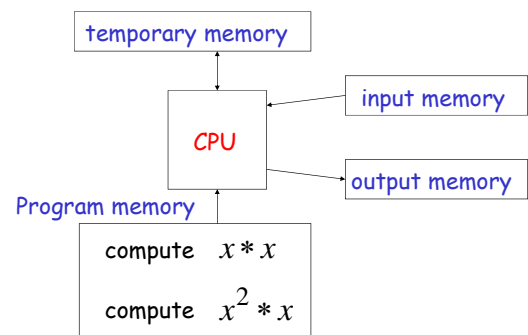


2



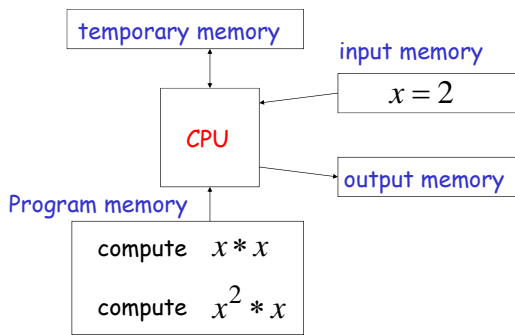
3

Example: $f(x) = x^3$



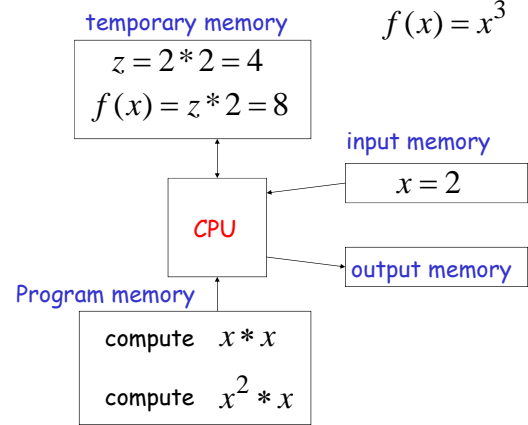
4

$f(x) = x^3$

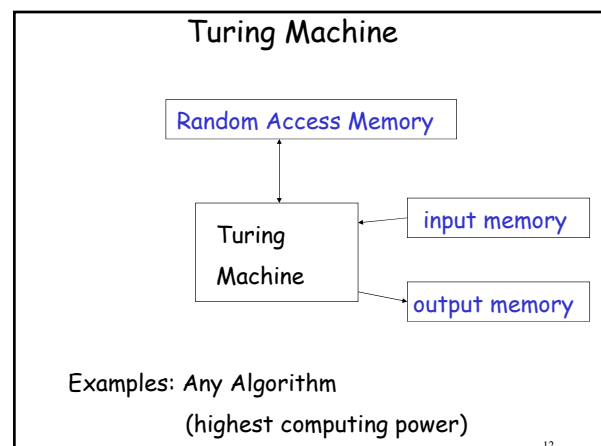
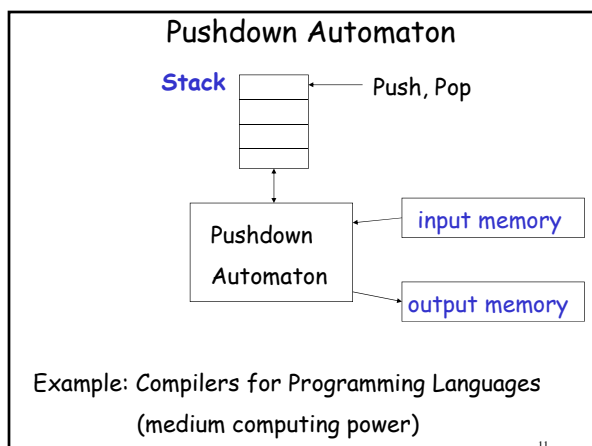
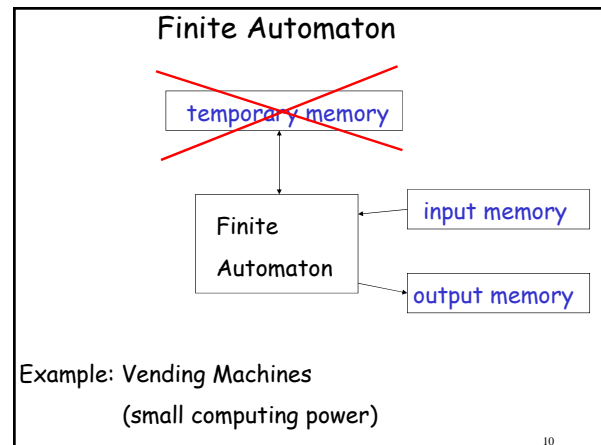
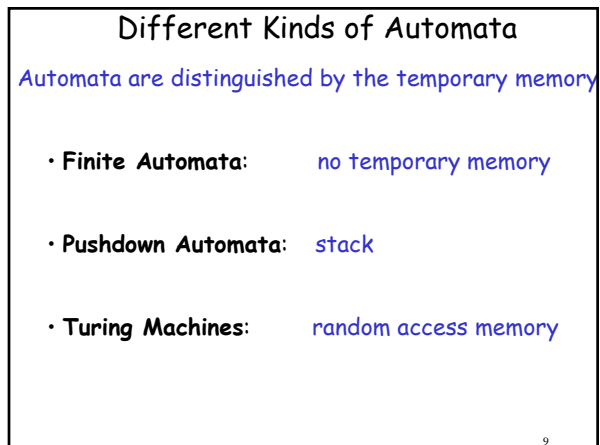
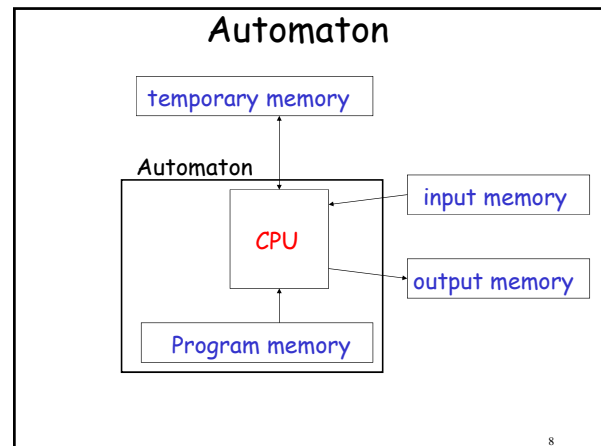
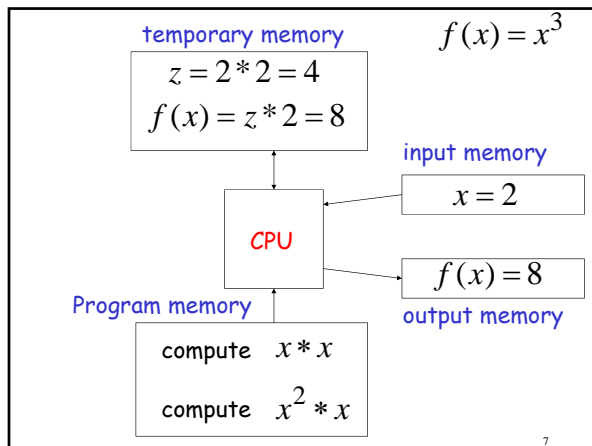


5

$f(x) = x^3$



6



Power of Automata

Finite Automata < Pushdown Automata < Turing Machine

Less power → More power
Solve more computational problems

13