Are these languages regular

nonRegular = equal number of 0's and 1's

Regular= has at least 100 1's

nonRegular= 0^n1^n for n>=0

Regular languages can be infinite but must be described using finitely many states

Thus there are restrictions on the structure of regular languages

Pumping lemma

Let L be a regular language there is a positive integer p such that any s member of L with lsl > p can be pumped

P is the pumping length of L

This meant that evey string s member of L contains a substring that can be repeated any number of times (via a loop)

The statement "s can be pumped" means that we can write s = xyz, where

Xy^iz memeber of L for all i>=0

lyl>0

lxyl<=p