

## Problem 1

gcc: v4.6.3  
flex: v2.5.35  
bison: v2.5

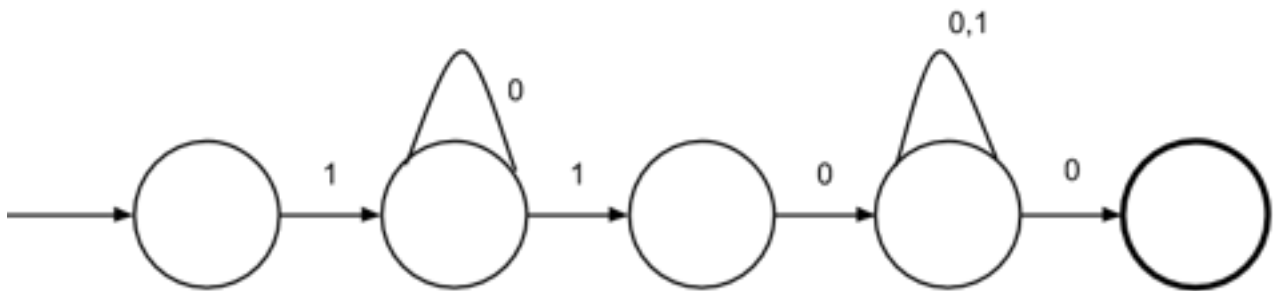
## Problem 2

A compiler translates a whole program to executable code before it can be executed.

An interpreter translates the program statement by statement, and executes the statement right away.

## Problem 3

a)



b)

All words in the language start with a '1' symbol. Then they may contain an optional number of '0' (including none). Then all words must include a '1' followed by a '0'. Afterwards they may include any arbitrary-length permeation of the symbols '0' and '1'. All words end with a '0'.

Valid words:

- 1100
- 101010
- 1000000000000010000000000000
- 101011111111111110

c)

	1	0
S1	S2	-
S2	S3	S2
S3	-	S4
S4	S4	{S4, S5}
S5	-	-

## Problem 4

