

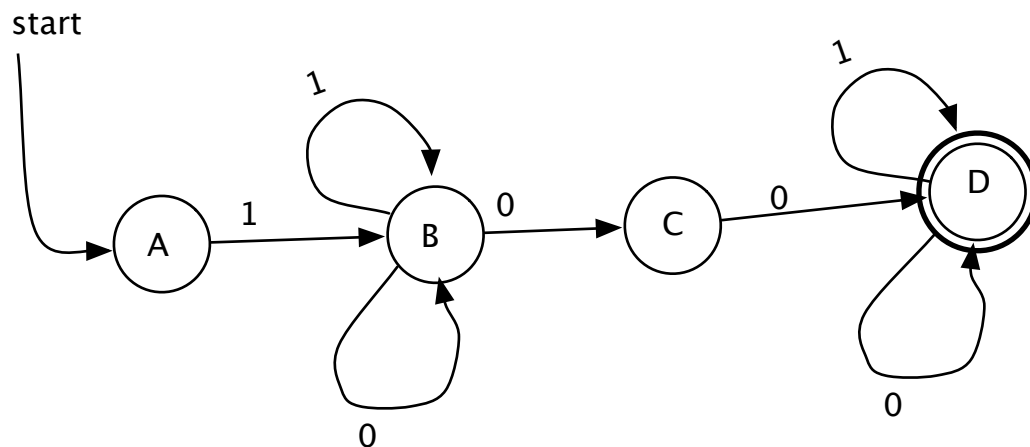
**Task 1:**

GCC 4.2.4  
Flex 2.5.34  
Bison 2.3

**Task 2:**

A lexical analyzer parses the input into valid tokens (if it consists of valid lexema), while an acceptor merely determines whether the input is valid lexema for our language.

**Task 3:**



$1(0|1)^*00(0|1)^*$

I have named my states A-D to avoid confusion with the numbers used for transition-values.

3.2: This language describes any binary number that starts with 1, and then has any number of 0s or 1s followed by a pair of 00s and then any number of 0s or 1s

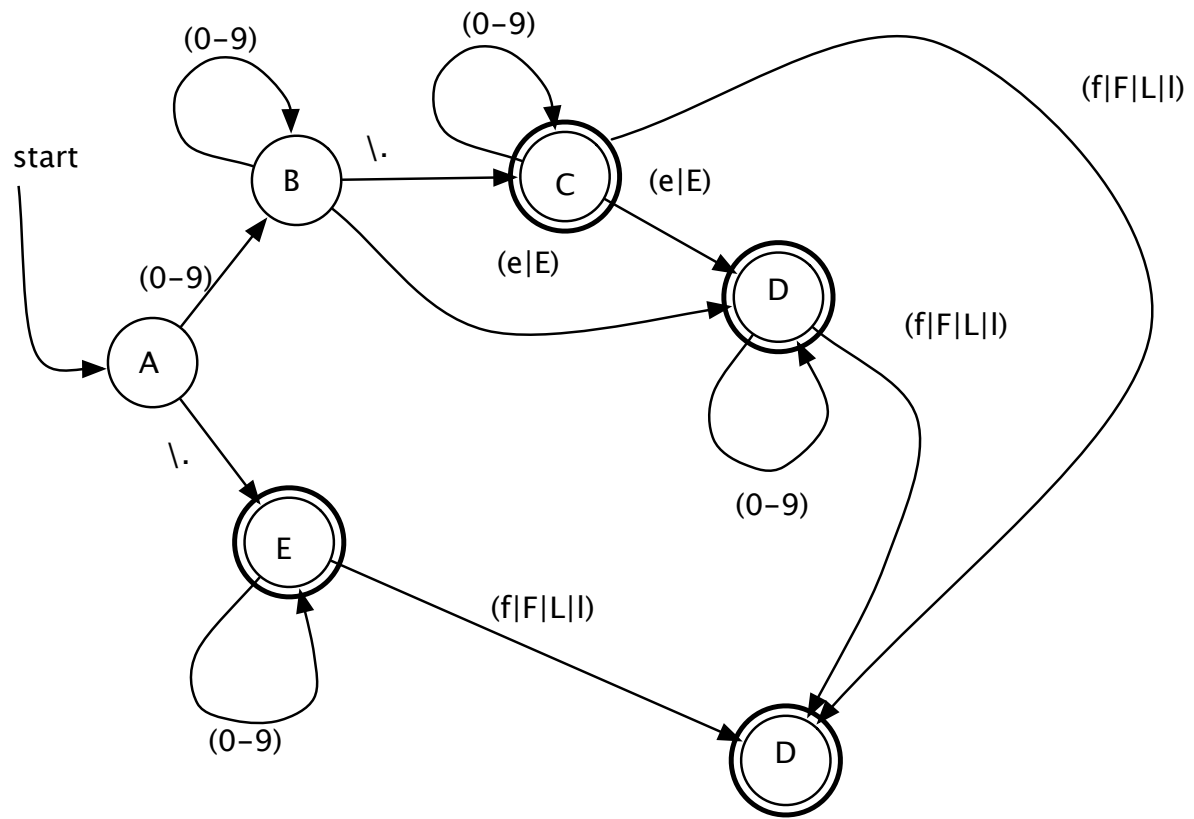
Valid examples:

100  
10101010100111  
111100  
11100110011010

3.3

STATE	0	1
A	$\emptyset$	{B}
B	{B,C}	{B}
C	{D}	$\emptyset$
D	{D}	{D}

**Task 4:**



**Task 5:**

See attached source-code.