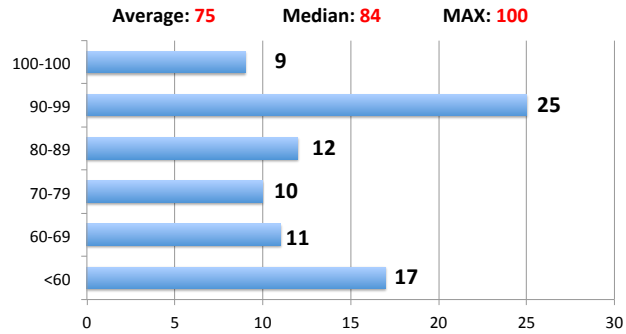
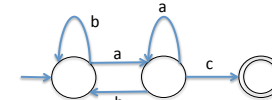


Exam-I CS 152 2020



1. 20 points

$(ab)^*ac$



(2) 30 points

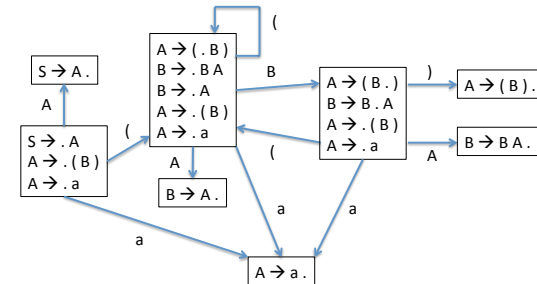
$S \rightarrow aS \mid BCd$
 $B \rightarrow bB \mid \epsilon$
 $C \rightarrow cC \mid \epsilon$

	FIRST	FOLLOW
S	a, b, c, d	\$
B	b, ϵ	c, d
C	c, ϵ	d

	a	b	c	d	\$
S	$S \rightarrow aS$	$S \rightarrow BCd$	$S \rightarrow BCd$	$S \rightarrow BCd$	
B		$B \rightarrow bB$	$B \rightarrow \epsilon$	$B \rightarrow \epsilon$	
C			$C \rightarrow cC$	$C \rightarrow \epsilon$	

(3) 50 points

$S \rightarrow A$
 $A \rightarrow (B) \mid a$
 $B \rightarrow BA \mid A$



No Conflicts!