

Compilers, Spring Term 2020  
Assignment 2

Due on May 9, by 23:59

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Name:

Group:

ID:

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Write an SDD for a CFG that generates the language  $a^*c^*b^*$  such that the start variable has an attribute *check* whose value is 1 if the generated string is of the form  $a^n c^m b^n$  with  $2^n \leq m \leq 3^n$ , for some  $n \geq 0$ , and is 0 otherwise.

*In constructing the SDD, make sure that the only operations performed on attributes are assignments, additions, subtractions, multiplications, and equality checks; an equality check is an expression of the form  $x == y$  whose value is 1 if  $x$  is equal to  $y$  and is 0 otherwise.*