Universität Koblenz-Landau

FB 4 Informatik

Prof. Dr. Viorica Sofronie-Stokkermans   **5. November 2018**

<div align="center">

Exercises for "Formal Specification and Verification"
Exercise sheet 3

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Exercise 3.1:
Consider the following boolean formulae

$F := (P \wedge ((Q \wedge \neg R) \vee (\neg Q \wedge R)));$

$G := P \wedge \neg Q \wedge R.$

(1) Construct a reduced OBDD B_F for F with the order $[P, Q, R]$ i.e. such that the root is a P-node followed by Q- and then R-nodes.

(2) Construct a reduced OBDD B_G for G with the order $[P, Q, R]$.

(3) Let B_F, B_G be the OBDDs constructed previously.

Compute $\mathsf{apply}(\wedge, B_F, B_G)$.

Please submit your solution until Sunday, November 11, 2018 at 17:00. Please do not forget to write your name on your solution.

Submission possibilities:

- By e-mail to `sofronie@uni-koblenz.de` with the keyword "Homework FSV" in the subject.

- Put it in the box in Room B 222.