CEN6070 – Software Verification, Spring 2010

Homework #4 (12 points), **Due** March 11 (Thursday)

Given the following model and temporal formula:

(1) Model $M = (S, R, L)$

where $S = \{s1, s2, s3, s4\}$

$R = \{(s1, s2), (s2, s3), (s3, s2), (s3, s4), (s4, s4)\}$

$L = \{s1 \mapsto \{p\}, s2 \mapsto \{p\}, s3 \mapsto \{p, q\}, s4 \mapsto \{q\}\}$

(2) Temporal formula $f = p \wedge E(p \, U \, q)$

Show the steps of symbolic model checking including

(1) the OBDDs for M, p, and q,

(2) the OBDDs during the calculations of model checking.