**Implementing the functions pre∃ and pre∀**

It remains to show how an OBDD for pre∃(X) and pre∀(X) can be computed, given OBDDs BX for X and B→ for the transition relation →. First we observe that pre∀ can be expressed in terms of complementation and pre∃, as follows: pre∀(X) = S − pre∃(S − X), where we write S − Y for the set of all s ∈ S which are not in Y . Therefore, we need only explain how to compute the OBDD for pre∃(X) in terms of BX and B→suggests that one should proceed as follows:

1. Rename the variables in BX to their primed versions; call the resulting OBDD BX’ .

2. Compute the OBDD for exists(ˆx , apply(·, B→, BX’ )) using the apply and exists algorithms