

Tutorial 3
CS-676
Submission Deadline 17/2/2007

1. Consider an arbiter with two request lines r_1 and r_2 and two grant lines g_1 and g_2 . The corresponding sets of properties using LTL are:
 $G[r_1 \Rightarrow Xg_1 \wedge XXg_1]$
 $G[\text{not}(G_1) \Rightarrow G_2]$
 $G[\text{not}(G_1) \text{ or } \text{not}(G_2)]$.
Express the properties using procedural e-codes.
2. Write e-snippets to express and check properties 1, 2 and 3 of our arbiter. Compare the code size of your procedural construction with that using temporal constructs. Appreciate why 'e' is yet another language.
3. Think of scenarios or designs (at least one) in which synchronization is important and try to express them using e-codes