Formal Languages and Automata Theory (CS21004)
Tutorial XI

Class: CSE 2nd Year   *Date: 5th April, 2010*

1. Prove by reduction that $L_\emptyset = \{< M >: M$ is a Turing machine and $L_M = \emptyset\}$ is undecidable.

2. Prove by reduction that $L_= = \{< M_1, M_2 >: M_1$ and M_2 are Turing machines and $L(M_1) = L(M_2)\}$ and $L_{\neq} = \{< M_1, M_2 >: M_1$ and M_2 are Turing machines and $L(M_1) \neq L(M_2)\}$ are undecidable.