More Mapping Reductions

CS 311, Fall 2015

Exercise 1   Use a reduction to show that the language CFL_{TM} is undecidable.

$$CFL_{TM} = \{\langle M \rangle \mid M \text{ is a } TM \text{ and } L(M) \text{ is context free}\}$$

Exercise 2   Use a reduction to show that the language $HALTss_{TM}$ is undecidable.

$$HALTss_{TM} = \{\langle M \rangle \mid M \text{ is a } TM \text{ that halts on the string } 10101\}$$