

ENEE 457

Static Analysis Class Exercise

1. Assume we have an analyzer that takes as input any C program and has the following properties:
 - a) The analyzer always terminates
 - b) If the C program makes an array out-of-bounds memory access during its run on an input x , then the analyzer outputs 1.
 - c) If the C program does not make an array out-of-bounds memory access during its run on an input x , then the analyzer outputs 0.

Show that the analyzer can be used to solve the Halting Problem.

