

## **Wilson Li Sandbox Descriptions**

### easytocode.py:

The sandbox is written in Python. It reads in a Python code file, blacklists certain keywords, clears the built-ins namespace, and execs the code.

### potentiallyhackablesandbox.py:

The sandbox is written in Python. It reads in a Python code file, blacklists certain keywords, clears/replaces the built-ins namespace, and execs the code.

### a-sandbox.py:

The sandbox is written in Python. It reads in a Python code file, creates a white list of only numbers, arithmetic operators, parentheses, and the letter 'a', clears the built-ins namespace, and execs the code. Then it prints whatever is stored in the variable 'a' when the program finishes.

### ceinfo:

The sandbox is written in Java. The sandbox implements its own commands that a program can perform which are the basic arithmetic operations of addition, subtraction, and multiplication. It performs these operations on values stored in an array which the program can set the values at different array indices. It reads in a code file line by line and evaluates it based on the white list of commands.

### crimsonBeard:

The sandbox is written in Python. The sandbox implements its own commands that a program can perform such as arithmetic operations, looping, printing, and defining, assigning, and deleting variables. It reads in a code file line by line and evaluates it based on the white list of commands.

### fjm266:

The sandbox is written in Python. It reads in a Python code file, replaces the built-ins namespace with custom data supplied by the user and execs the code.

### kellender:

The sandbox is written in C. It forks a process and creates a new limited memory space for the child process. It reads in a compiled C code file and bytes for memory allocation, clears the environment variables, limits the memory usage, and execs the code. It pipes the output from the child back to the parent to print to console.

mramdass:

The sandbox is written in Python. The sandbox forces the user to use Python 3.3 or greater on a Linux system. First, the sandbox puts a file lock on itself. Then, it reads in a Python code file, blacklists certain keywords, replaces the built-ins namespace and execs the code.

PankajMoolrajani:

The sandbox is written in Python. It reads in a Python code file, checks file path and size of code file, limits the memory usage, blacklists certain keywords and modules, and execs the code.