Modified IWLS 2022 Programming Contest

https://www.iwls.org/iwls2022/

Introduction

- The goal of this year's contest is to synthesize small circuits for completely-specified multi-output Boolean functions represented using truth tables
- Participants should find competitive solutions for different benchmarks using a variety of novel breakthrough methods (e.g., search and enumeration, new decomposition, etc.)

- Problem description
  - https://www.iwls.org/iwls2022/contest/IWLS_2022_Programming_Contest.pdf
- Benchmarks
  - https://www.iwls.org/iwls2022/contest/2022_IWLS_Contest_Benchmarks_020722.zip

PA2

- You are asked to develop a program to generate/learn a script that is composed of the commands in ABC
- Requirements
  - One script per benchmark
  - At most 23 commands in the script
    - First command is supposed to be *read_truth –xf xxx.truth*
    - Last two commands are supposed to be *write xxx.aig; print_stats*
  - Correctness is necessary (*cec*)
  - Time limit for generating a script: 1 hour
  - Time limit for executing a script: 1 hour
- Same evaluation scenario as the contest

Delivery & Due Date

- A zip file including
  - Your source code and a ReadMe describing how to compile and run your program
  - Scripts for all the benchmarks

- Due on 2024/4/4