

PROJECT DEMO

Command Interpreter

Basic Commands

input: **20ri 1drop Z Z 0down 3dow 2clock 3seq drop 3levelup right counter drop drop leveldown 2no sequence2.txt 1ran 4restart 1drop counter 2counter ri 2dr**

Or using **sequence** command to get equivalent inputs as above:

sequence command1.txt

The above input demonstrates the following functionalities:

- All of the basic commands `left`, `right`, `down`, `clockwise`, `counterclockwise`, `drop`, `levelup`, `leveldown`, `norandom file`, `random`, `sequence file`, `Z (w.l.o.g)`, `restart` works as intended.
- We are able to use shortcut commands. For example, “`ri`” is the same as “`right`”, “`dr`” is the same as “`drop`”.
- Commands can take a multiplier prefix. Moreover,
 - A prefix of 0 does not do anything to the program
 - A prefix that exceeds the maximum time a command can be executed takes in the maximum time (when an I block is at the leftmost position, calling `20right` is the same as calling `7right`)
 - Applying a multiplier to the `restart`, `hint`, `norandom`, `random` have no effect (demonstrated through `2no`, `1ran`, `4restart`, etc.)

Handling Invalid Input

input: **right**

When the user enters an invalid input, the program will ignore the input and let the user re-input a command. For example, when we enter a command called `rright`, nothing happens.

Command-line Interface

Our program supports all five options listed in the project deliverables.

This is demonstrated through the following argument inputs:

-text

-seed 123

-scriptfile1 sequence3.txt

-scriptfile2 sequence4.txt

-startlevel 3

Additionally, we have an extra command called “bonus” which enables bonus features.

-bonus

Special Actions

A special action can be triggered when entering

I drop I drop I drop I drop

I 4right drop I 4right drop I 4right drop I 4right drop

O 8right drop O 8right drop

I 10right counter 3right drop

After that, we can test all three special actions and they all work as intended.

Scoring

Line Canceling, Score Update, and the Appearance of Star

4levelup

dr I dr I dr I dr

I 20right dr I 20right dr I 20right dr I 20right dr

I clock 6right dr

I clock 6right dr

I clock 4right dr

When we enter the above inputs, we will see a line canceling along with the correct score updated. Moreover, since we did not cancel a line within 5 turns and it is level 4, a star is dropped in the center column.