

Text Data Files

`xsort.pbd`

This file tests that your sort call in output works. It has no interactions with the flippers, so it should be good for testing your numbers as well. It has 3 balls pointed downwards and they invert their order as they go down the table. It also has the ball from the lab2 xperfect file to simultaneously test basic computations. This file has a medium/small amount of output. This is your “go-to” file for getting your numbers right.

This file will be used in grading.

The xflip family of files

Use `xflip.pbd` for initial testing of your flippers. It tests the inner edges of the flipper hit box where $x = +/-2.0$. This file has minimal output. Use this file as your first test of flippers.

Use `xflip2.pdb` to test the outer edges of the flipper hit box where $x = +/-5.0$. This has a medium amount of output, but the balls hit the flippers the first time they move. Use this file as your second test of flippers.

The `xflip3.pdb` file combines the other two files to make life easier on the graders. **It will be used in grading.**

Graphics Data Files

I will leave it up to the graders to work with me on the best way for them to grade the graphical output. That said, the following two files can be used to check for everything.

`x7.pbd`

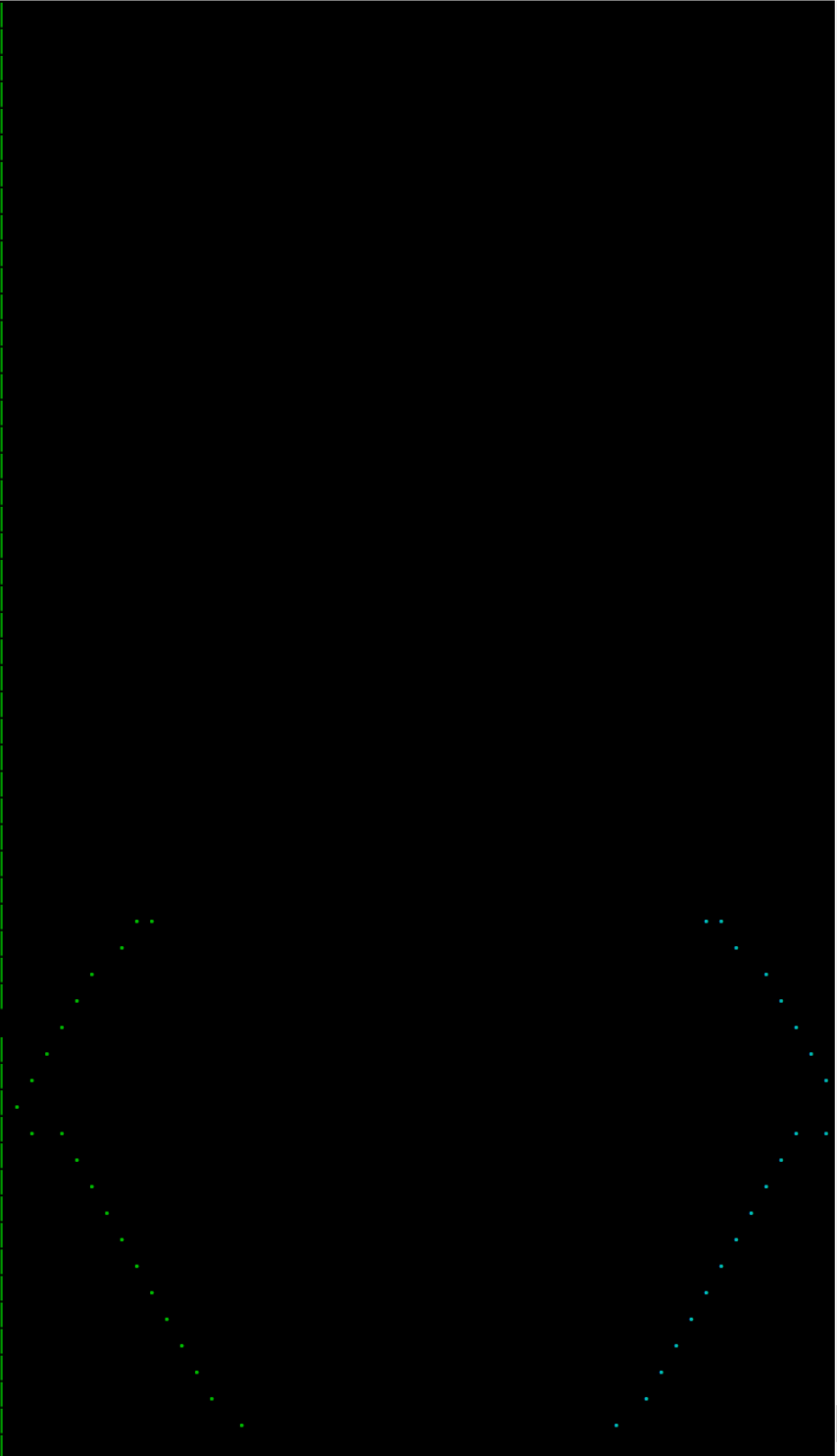
This file has all 7 colors present. It does not hit the flippers. It does hit all three walls. Make sure that you see all three wall messages in the status lines to the lower left. Make sure that the score is present in every frame and that it updates as balls come off the table. This file benefits from having a very tall window (55 lines or more) so that you can see the load and launch messages along with the off table messages and everything between them.

It may be easier to take a screenshot while the last few dots are still on screen and use that to check for all of the messages.

The screenshot below has an incorrect value for the sim clock.

```
stdlinux.cse.ohio-state.edu - PuTTY
SIM: 00m 02.000s
REAL: 04.052668s
FPS: 61.258 fps
Screen: 55 L, 80 C
Table: 55 R, 55 C
DX= 0.436 DY= 0.873
Supports 8 colors
45 status lines
Version 2.1
428 points

Loaded
Launch
Loaded
Launch
Loaded
Launch
Loaded
Launch
Loaded
Launch
Loaded
Launch
Loaded
Launch
Loaded
Launch
Right wall
Left wall
Right wall
Left wall
Right wall
Left wall
Left wall
Right wall
Upper wall
Left wall
Upper wall
Upper wall
Right wall
Right wall
Left wall
Right wall
Left wall
Left wall
Right wall
Off table
Left wall
Right wall
Off table
Off table
Off table
Off table
Left wall
Right wall
Off table
Off table
```



xinf.pbd

This file is the easiest way to make sure that your code is telling the graphics library to show the flippers when they activate. It also thoroughly tests the flipper hit boxes. Hit ^C to terminate it early once you

verify that `pb_left` and `pb_right` are being called. Since the flippers are only there for a fraction of a second, it's really hard to get a screenshot of them.