Steve Corya
nhorse (Ncurses Horse Race) – Project Outline

Ncurses is a C++ library for building TUI's. My project will implement a horse race program with an ncurses UI.

- Create a horse race program similar to the CSCI240 project
- Instead of printing new lines, the TUI version will overwrite previous output

```
1|- - - - - - - - - - - - - - - - - - - - - - - - - - - -                              |
2|- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -        |
3|- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -|
4|- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -                        |
5|- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -                  |
6|- - - - - - - - - - - - - - - - - - - - - -                                          |
```

- Above is an example with six horses
- The user runs the program with a numeric argument (ex. ./nhorse 6)
- This program would benefit from three classes
        - Horse class to create an object for each horse
        - Track class to create a number of lanes to be filled by horses
        - Race class to tie the horse and track classes together and to start and stop the race

Steve Corya
hrtui (Horse Race Text User Interface) – Project Documentation

Steve Corya's hrtui 1.0
```
1|---------------1------|
2|------------2--------|
3|--------------3------|
4|--------------------4| Horse #4 is the winner!
```
^B begin race   **^D** delete tallys   **^E**   exit

- This program implements a horse race with a pseudo-randomly determined winner
- Three different classes
    - The Horse class
        - Represents an entity within the race
        - Knows how far along the race track it is
        - At ~50% advances or not
    - The Main class
        - Handles ncurses (input/output)
        - Times the race
    - The Race class
        - Race like event and race like track
        - Produces output strings
        - Opens output file and logs output
- Use case(s)
    - Gambling halls
    - Fraternity houses
    - Indiana casinos
    - Entertainment
- Data design
    - Aforementioned classes
    - Horse, Race, and Driver
    - Output logs integers corresponding to winners
    - Logs can be deleted via main program