CARBIRD FURY

- A multithreaded interactive survival game

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Carbird Fury

A Multithreaded Interactive Game

Start

Game Initialization using ncurses → Display refreshed without buffer

Create 6 Threads and detach

Thread 6

Is position of car == position of obstacle?
- No → Iterate obstacle no.
- Yes → gameover = 1

Thread 5

If obstacle out of scope
- No
- Yes → Obstacle Odd: Repositon in front of car and top of the screen

Obstacle Even: Reposition at top of the screen using a randomized algorithm

Thread 4

Take Directional Input
- No change
- If 'a' → Subtract 20 cols from car position
- If 'd' → Add 20 cols to car position

Main

Initialize start_clock

gameover == 1?
- No
- Yes → 1. Game over routine, 2.Handle Score, 3.New High Score?

Update High Score and exit

Thread 1

Check car position and PrintCar()

Is gameover ?
- NO
- Yes → pthread_exit

Thread 2

Create Moving Fence using frame printing

Thread 3

Is obstacle changed
- Yes → Print Obstacle, shift downwards and iterate

USE OF NCURSES.H

```
// Print the car at the given location
void PrintCar(WINDOW * win) {
  if(game_over)              // terminate the thread in case of game_over
    pthread_exit(NULL);
  mvwprintw(win, row_car, col_car, " ^**^ ");
  mvwprintw(win, row_car + 1, col_car, " **** ");
  mvwprintw(win, row_car + 2, col_car, "******");
  mvwprintw(win, row_car + 3, col_car - 5, " ************** ");
  mvwprintw(win, row_car + 4, col_car - 5, "*****^*****^****");
  mvwprintw(win, row_car + 5, col_car - 5, "****        ****");
}
```
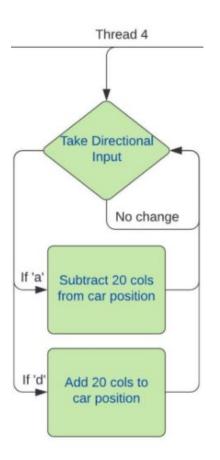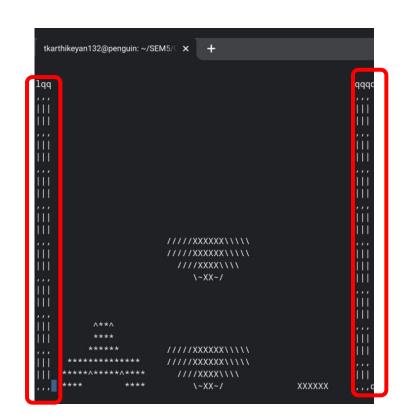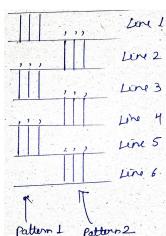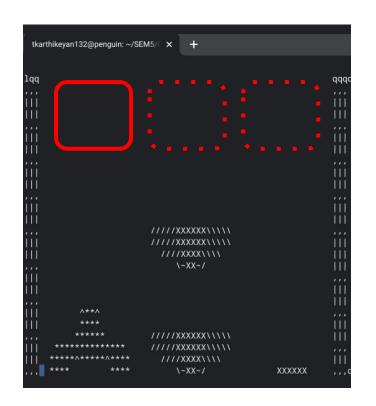
PRINTING CAR AND OBSTACLES

MOVEMENT OF CAR
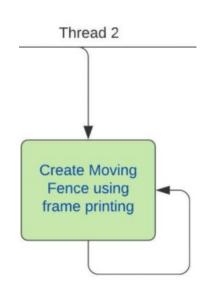
MOVEMENT OF FENCES

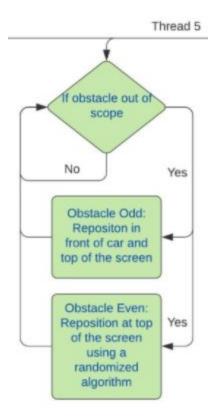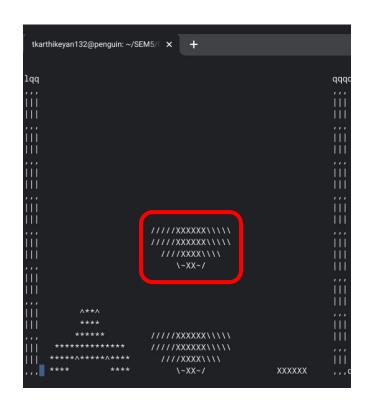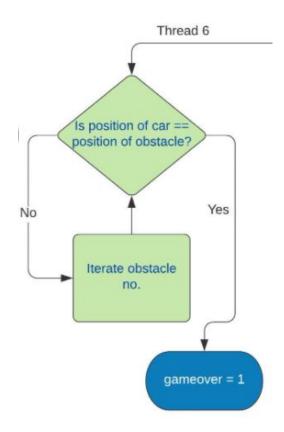# OBSTACLE CREATION

OBSTACLE HANDLING

HIGH SCORE MAINTENANCE

highscore_db.txt


```
tkarthikeyan132@penguin: ~/SEM5/    ×    +

'''                                                      |||
|||                                                      |||
|||                                                      |||
'''                                                      |||
|||                                                      |||
|||                                                      |||
|||    //////-     /\\     |x\___/x| XXXXXXX            |||
|||    //-        //_\\    |X-\_/-X| XX____             |||
|||   // /\//-  //|||\\   |X|   |X| XX^^^^              |||
|||    //////-  //    \\  |X|   |X| XXXXXXX             |||
|||                                                      |||
|||    XXXXXXX  \\    //  XXXXXXX  XXXx~\               |||
|||    XX  XX    \\  //   XX____   XX___))              |||
|||    XX  XX     \\ //    XX^^^^    XXXx               |||
|||    XXXXXXX     \\//    XXXXXXX  XX  XX              |||
|||                                                      |||
'''           Your Score 625                            |||
|||                                                      |||
|||         Congratulations! NEW High Score             |||
|||                                                      |||
|||         Last highscore 21 smashed brutally          |||
'''                                                      '''
```

THANK YOU