1. Write a Torpedo Game program. Ships are represented as illumined LEDs on the switch light boxes, and can travel left to right or right to left. The ships can be either - Destroyer 1 LED, Battleship 2 LEDs, Aircraft Carrier 3 LEDs.

The ships can appear on the LED display, in random order, in random direction, and at random times.

The user launches torpedoes from any one of the eight push buttons, only one torpedo can be launched per ship. A Destroyer is worth 12 Points, a Battleship 8 Points, an Aircraft Carrier 4 Point. The score is displayed on the Seven Segment display in Hexadecimal. The torpedoes take a finite amount of time from launch to impact with the ship

Every time the user scores a hit, the buzzer sounds, and the speed of the ships increases. The games restarts when the user misses three times.