Smart Car برق بنزين

Project Purpose:

This project is to design and implement a car that follows a straight lane, gives an alert when it drifts out of lane and stops whenever an object is detected in front of it. We used 2 inputs (infrared sensor reading and lane detector reading) and 6 outputs (motor and 5 letters ‘ALERT’ for the 7-segment display). We assigned the 2 inputs infra and lane to pins AB3 and AB2, the motor output to pin AA2, the 5 letters representing ‘ALERT’ on the 7-segment display using the data sheet provided. At first, we check if the lane detector reading is 1; meaning the car drifted out of the lane, we display ‘ALERT’ on the 7-segment display, else we do not show anything. Then we check if the infrared sensor reading is 0; meaning an obstacle is detected, we stop the car(turn off the motor).