















```
File Edit Selection View Go Run Terminal Help
                                                                                                                                                       <u>▶</u>▷∨ @ ኳ Ш ···
        EXPLORER
Ф
                                               \label{lem:master-embedded-Systems} \mbox{$>$ Unit4 > CollisionAvoidance } \mbox{$\subset$ collision\_avoidance.c} \mbox{$>$ $$ STATE\_define(CA\_driving)$}
      ∨ PROJECT
         LI CARCHISIONISISON
                                                           fflush(stdout);
         {} launch.json
                                                           (CA_distance <= CA_threshold) ? (CA_state = STATE(CA_waiting)): (CA_state = STATE(CA_driving));
         {} settings.json
         () tasks.json
         > dosingMachine
                                                      STATE_define(CA_waiting)
        > FIFO
        > FIFO_test
                                                          CA_State_id = CA_waiting;
                                                           //state action
        > LIFO buffer
                                                          CA speed = 0;

    Master-Embedded-Systems

                                                          DC_motor(CA_speed);
         v t&d
                                                           printf("CA_waiting_state: distance = %d speed = %d\n",CA_distance,CA_speed);

✓ CA_Unit4_lesson2_3_modules

                                                           fflush(stdout);
          C CA.c
          C CA.h
           C Dc_motor.h
 C main.c
                                                           CA_State_id = CA_driving;
           C state.h
                                                           CA_speed = 30;
           C Us.c
                                                           printf("CA_waiting state: distance = %d speed = %d\n",CA_distance,CA_speed);
                                                           fflush(stdout);
           C Us.h
                                                           DC_motor(CA_speed);
         > Unit2
         ∨ Unit4
                                                                                                                                                            PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

    CollisionAvoidance

                                               DC busy state speed = 0
                                               Us_busy State: distance = 53
Us_sensor ---distance = 53---> CA_algorithm

■ collision_avoidance.o

                                                CA_waiting_state: distance = 53 speed = 30
                                                CA ---speed = 30--->DC_motor
                                               DC busy state speed = 30
                                               Us_busy State: distance = 45

    dc_motor.o

                                                Us_sensor ---distance = 45---> CA_algorithm
           CA ---speed = 0---->DC_motor
                                                CA_waiting_state: distance = 45 speed = 0
           C main.c
                                               DC busy state speed = 0
Us_busy State: distance = 55
           ≣ main.o
                                               Us sensor ---distance = 55---> CA algorithm
                                                CA_waiting_state: distance = 55 speed = 30
                                                CA ---speed = 30---->DC_motor
                                                DC busy state speed = 30
       > OUTLINE
                                               Us_busy State: distance = 46
Us_sensor ---distance = 46---> CA_algorithm
       > TIMELINE
```