Rack and Pinion with (higher end mg995)servo motor - horizontal- 1 — Pseudocode

BEGIN

SETUP:
   - Define L1 as limit switch (fully open)
   - Define L2 as limit switch (fully closed)
   - Configure L1 and L2 as input pins with pull-down
   - Define motor control functions:
      motor_stop() → stop motor
      motor_reverse() → run motor in open direction
      motor_forward() → run motor in close direction
   - Start with motor stopped

MAIN LOOP:
   1. OPENING DOOR:
      - Print "Opening door..."
      - Run motor in reverse (OPEN)
      - WHILE (L1 is NOT triggered):
         wait small delay
      - STOP motor
      - Print "Door fully open → waiting"
      - Wait 2 seconds

   2. CLOSING DOOR:
      - Print "Closing door..."
      - Run motor forward (CLOSE)
      - WHILE (L2 is NOT triggered):
         wait small delay
      - STOP motor
      - Print "Door fully closed → waiting"
      - Wait 2 seconds

   3. REPEAT loop forever

END