```
193
194     ------------------------------------------------------------
195     -- this process assigns each hexadecimal number (0-F) as well
196     -- as some additional letters to different values of d.
197     ------------------------------------------------------------
198     process(d)
199     begin
200         case d is
201             when "00000" => led <= NOT "11111100"; -- 0
202             when "00001" => led <= NOT "01100000"; -- 1
203             when "00010" => led <= NOT "11011010"; -- 2
204             when "00011" => led <= NOT "11110010"; -- 3
205             when "00100" => led <= NOT "01100110"; -- 4
206             when "00101" => led <= NOT "10110110"; -- 5
207             when "00110" => led <= NOT "10111110"; -- 6
208             when "00111" => led <= NOT "11100000"; -- 7
209             when "01000" => led <= NOT "11111110"; -- 8
210             when "01001" => led <= NOT "11100110"; -- 9
211             when "01010" => led <= NOT "11101110"; -- A
212             when "01011" => led <= NOT "00111110"; -- b
213             when "01100" => led <= NOT "10011100"; -- C
214             when "01101" => led <= NOT "01111010"; -- d
215             when "01110" => led <= NOT "10011110"; -- E
216             when "01111" => led <= NOT "10001110"; -- F
217             when "10000" => led <= NOT "01101110"; -- H
218             when "10001" => led <= NOT "10110110"; -- S
219             when "10010" => led <= NOT "00011100"; -- L
220             when "10011" => led <= NOT "01111100"; -- U
221             when others  => led <= (others => '0');
222         end case;
223     end process;
224
225     ------------------------------------------------
226     -- the two bit vector m is increased by one on
227     -- each positive clock edge of the 762Hz clock
228     ------------------------------------------------
229     process(clock)
230     begin
231         if rising_edge(clock) then
232             m <= m_next;
233         end if;
234     end process;
235 end Behavior;
236
```