

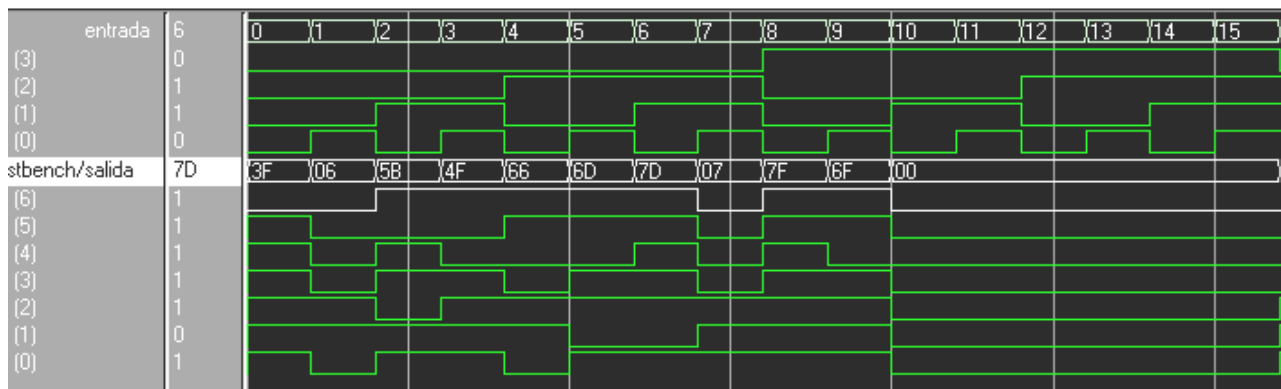
## DECODIFICADOR DE 7 SEGMENTOS

```

entity dec7 is
port (entrada: in bit_vector (3 downto 0);
      salida: out bit_vector(6 downto 0));
end dec7;
architecture algoritmo of dec7 is
begin
  process (entrada)
  begin
    case entrada is
      -- SALIDA = SEGMENTOS [ G F E D C B A ]
      when "0000" => salida <= "0111111";
      when "0001" => salida <= "0000110";
      when "0010" => salida <= "1011011";
      when "0011" => salida <= "1001111";
      when "0100" => salida <= "1100110";
      when "0101" => salida <= "1101101";
      when "0110" => salida <= "1111101";
      when "0111" => salida <= "0000111";
      when "1000" => salida <= "1111111";
      when "1001" => salida <= "1101111";
      when others => salida <= "0000000";
    end case;
  end process;
end algoritmo;

```

SIMULANDO CON EL TEST BENCH OBTENEMOS LA SIGUIENTE GRÁFICA



Por ser un decodificador de BCD a 7 segmentos, cualquier valor que no este entre 0 y 9 no se visualizará en el display (diodos LED sin polarizar)