



Universidade de Brasília - UnB
Departamento de Engenharia Eletrica - ENE

Pré-relatório Experimento 3
Atribuições condicionais e atribuições seletivas

Carlos Eduardo Taborda Lottermann
180041509

Prof. Luís Fernando Ramos Molinaro

Brasília, DF
2019

Código do 1º visto em VHDL:

```
library IEEE;
use IEEE.STD_LOGIC_1164.ALL;
entity Visto_1 is
    Port ( S : in  STD_LOGIC_VECTOR (2 downto 0);
          D : in  STD_LOGIC_VECTOR (7 downto 0);
          Y : out STD_LOGIC);
end Visto_1;

architecture Visto_1_op of Visto_1 is
begin
    Y <=  D(0) when (S="000") else
          D(1) when (S="001") else
          D(2) when (S="010") else
          D(3) when (S="011") else
          D(4) when (S="100") else
          D(5) when (S="101") else
          D(6) when (S="110") else
          D(7) when (S="111") else
          '0' ;
end Visto_1_op;
```

Arquivo UFC do 1º visto:

```
NET "Y" LOC = "M5";
NET "D<0>" LOC = "N3";
NET "D<1>" LOC = "E2";
NET "D<2>" LOC = "F3";
NET "D<3>" LOC = "G3";
NET "D<4>" LOC = "B4";
NET "D<5>" LOC = "K3";
NET "D<6>" LOC = "L3";
NET "D<7>" LOC = "P11";
NET "S<0>" LOC = "A7";
NET "S<1>" LOC = "M4";
NET "S<2>" LOC = "C11";
```

Código do 2º visto em VHDL:

```
library IEEE;
use IEEE.STD_LOGIC_1164.ALL;

entity Visto_2 is
    Port ( A : in  STD_LOGIC_VECTOR (3 downto 0);
          Y : out STD_LOGIC_VECTOR (15 downto 0));
end Visto_2;

architecture Visto_2_op of Visto_2 is
begin
    with A select
    Y <=  "0000000000000001" when "0000",
          "0000000000000010" when "0001",
          "0000000000000100" when "0010",
          "0000000000001000" when "0011",
          "0000000000010000" when "0100",
          "0000000000100000" when "0101",
          "0000000001000000" when "0110",
          "0000000010000000" when "0111",
          "0000000100000000" when "1000",
          "0000001000000000" when "1001",
          "0000010000000000" when "1010",
          "0000100000000000" when "1011",
          "0001000000000000" when "1100",
          "0010000000000000" when "1101",
          "0100000000000000" when "1110",
          "1000000000000000" when "1111",
          "0000000000000000" when others;
end Visto_2_op;
```

Arquivo UFC do 2º visto:

a:

```
NET "A<0>" LOC = "P11";  
NET "A<1>" LOC = "L3";  
NET "A<2>" LOC = "K3";  
NET "A<3>" LOC = "B4";  
  
NET "Y<0>" LOC = "M5";  
NET "Y<1>" LOC = "M11";  
NET "Y<2>" LOC = "P7";  
NET "Y<3>" LOC = "P6";  
NET "Y<4>" LOC = "N5";  
NET "Y<5>" LOC = "N4";  
NET "Y<6>" LOC = "P4";  
NET "Y<7>" LOC = "G1";
```

b:

```
NET "A<0>" LOC = "P11";  
NET "A<1>" LOC = "L3";  
NET "A<2>" LOC = "K3";  
NET "A<3>" LOC = "B4";  
  
NET "Y<8>" LOC = "M5";  
NET "Y<9>" LOC = "M11";  
NET "Y<10>" LOC = "P7";  
NET "Y<11>" LOC = "P6";  
NET "Y<12>" LOC = "N5";  
NET "Y<13>" LOC = "N4";  
NET "Y<14>" LOC = "P4";  
NET "Y<15>" LOC = "G1";
```