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2  -- Name: Capt Jeff Falkinburg
3  -- Date: Spring 2016
4  -- Course: ECE 281
5  -- File: Lsn20_muxTwo.vhd
6  -- HW:   Lecture 20
7  -- Purp: Structural implementation of a 2 to 1 Multiplexer
8  -- Doc:  None
9  -- Academic Integrity Statement: I certify that, while others may have
10 -- assisted me in brain storming, debugging and validating this program,
11 -- the program itself is my own work. I understand that submitting code
12 -- which is the work of other individuals is a violation of the honor
13 -- code. I also understand that if I knowingly give my original work to
14 -- another individual is also a violation of the honor code.
15 -----
16 library IEEE;
17 use IEEE.STD_LOGIC_1164.ALL;
18
19 entity muxTwo is
20     Port ( A : in  STD_LOGIC;
21           B : in  STD_LOGIC;
22           S : in  STD_LOGIC;
23           Y : out STD_LOGIC);
24 end muxTwo;
25
26 architecture Behavioral of muxTwo is
27
28 begin
29
30     Y <= A when S = '0' else B;
31
32 end Behavioral;
33
34
```