

Digits of Pi  
CP220 Project Phase I  
Lovette Oyewole - 190888960

**Description**

Since computers count with two digits, 0 and 1, converting decimal numbers to binary makes calculations simple. The Digits of Pi circuit returns the corresponding Pi value (in binary) of the decimal place inputted (in binary). The decimal place ranges from 0 to 10.

**Inputs**

This circuit will have 4 inputs,  $a_1, a_2, a_3, a_4$ . They are binary numbers of decimal places from 0 to 10.

**Outputs**

This circuit will have 4 outputs,  $p_1, p_2, p_3, p_4$ . They are the corresponding binary values of Pi at the inputted decimal place.

**Ambiguous Cases**

- The inputs and outputs are whole binary numbers.
- The inputs cannot be greater than 10 or lesser than 0 .
- The outputs would always range from 1-9.
- The maximum bits for both the input and output is 4.

**Error Cases**

*As long as the user follows the ambiguous cases, there should not be any error*