

# FPGAspeaks

Level-1  
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## 1 Introduction

In level 1, information about basic logic gates like OR, NOR, AND, NAND, XOR, XNOR, and NOT gates is included.

## 2 Tools/Requirements

Xilinx Vivado

## 3 Basic Logic Gates

**OR Gate:** The output of the or gate is high when one of the inputs is high.

**NOT Gate:** The output of not gate is a complement of the input.

**AND Gate:** The output of the and gate is high when all the inputs are high.

**XOR Gate:** The output of the xor gate is high when the number of high inputs is odd.

**NAND Gate:** The output of nand gate is high when one of the inputs is low.

**NOR Gate:** The output of the nor gate is high when all the inputs are low.

**XNOR Gate:** The output of xnor gate is high when the number of high inputs is even.

## 4 What have I done at this level?

Coding of basic logic gates is done using Xilinx Vivado.

## 5 Links

Link to my github