SIT111 - Task 3.1P

This task was to build a full adder in HDL using the basic chips. Full adder logic can be build using Xor, AND and OR chips. Full adder consists of three inpurts A, B and Cin which is the carry in bit and two output such as sum and count.

A	B	Cin	Sum	Cout
0	0	0	0	0
0	0	1	1	0
0	1	0	1	0
0	1	1	0	1
1	0	0	1	0
1	0	1	0	1
1	1	0	0	1
1	1	1	1	1

The above truthtable is for the Xor chip which is used in this task to fulfill the requirements. Using the above logic of basic chips, we can implement the Full adder as the combinational logic of XOR chips and AND chips. This is as how I used to solve the task by arriving at the required solution by understanding how these chips work to build a full adder logic.