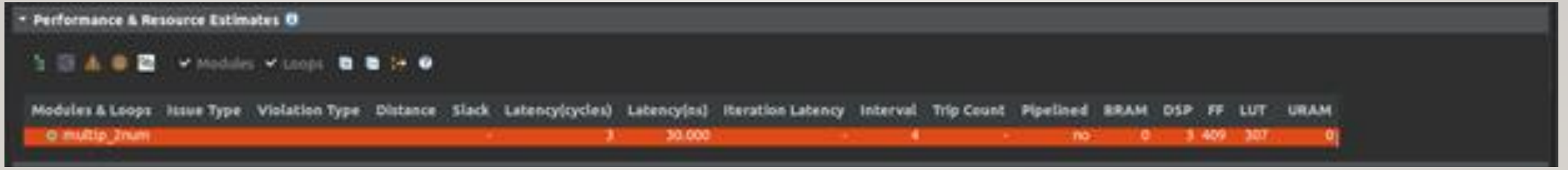
LAB1 REPORT

MULTIP_2NUM

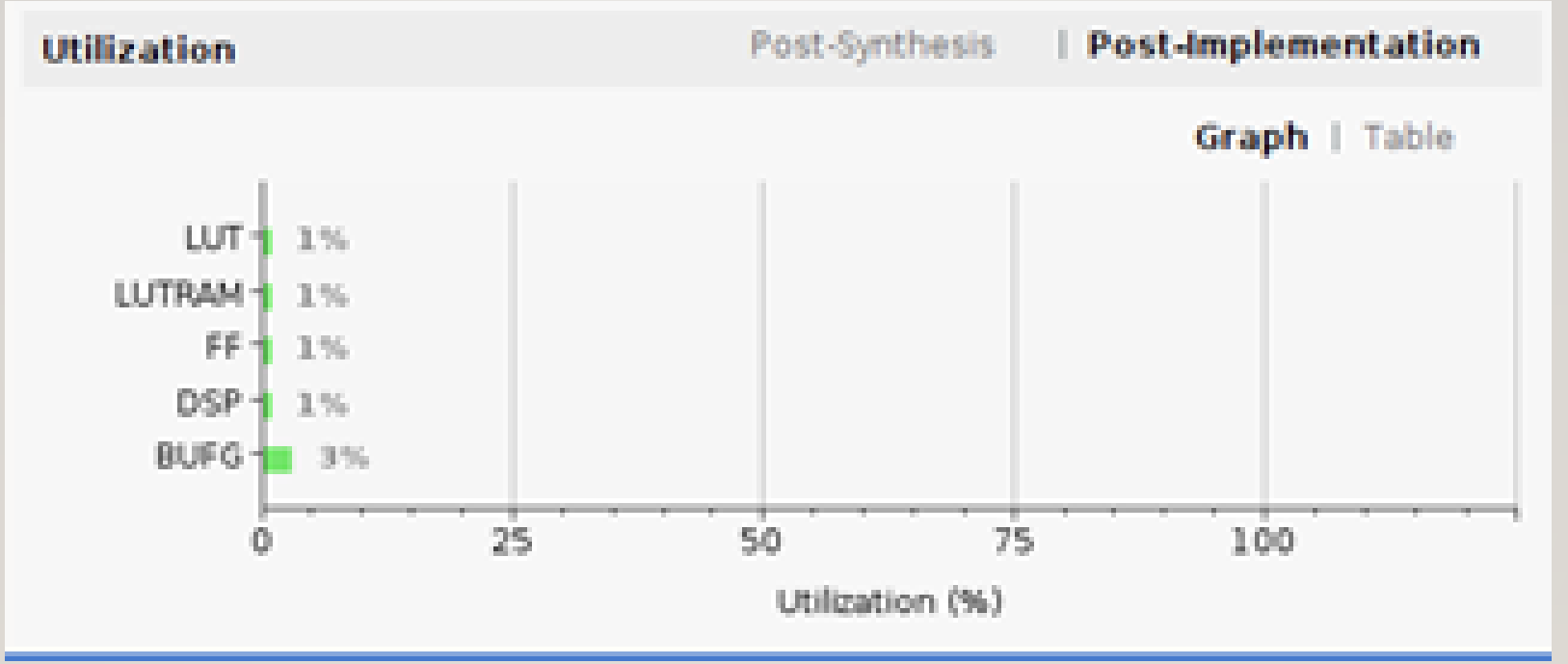
INTRODUCTION

- 簡單的乘法器(9*9)
- 運用已經寫好的code及testbench來學習分析的過程以及判斷各種檔案代表的意義

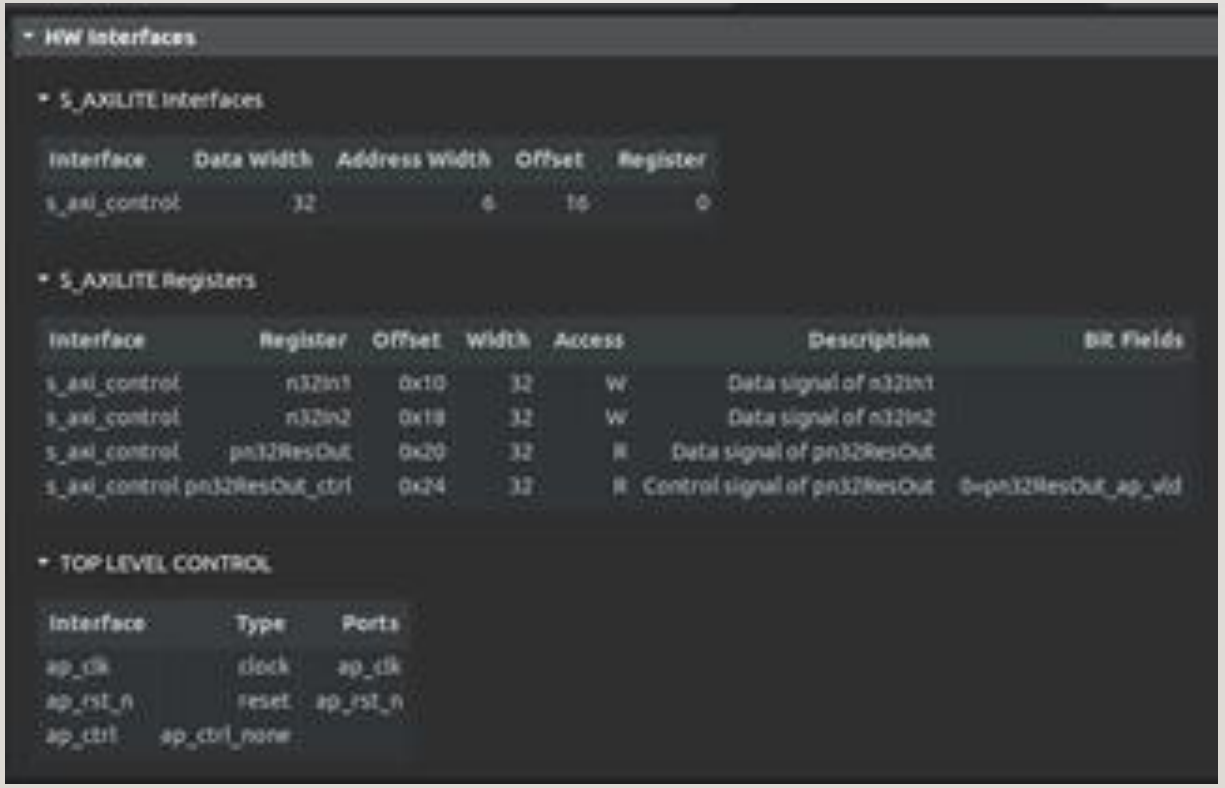
PERFORMANCE



UTILIZATION



INTERFACE



▾ HW Interfaces

▾ S_AXILITE Interfaces

Interface	Data Width	Address Width	Offset	Register
s_axi_control	32	6	16	0

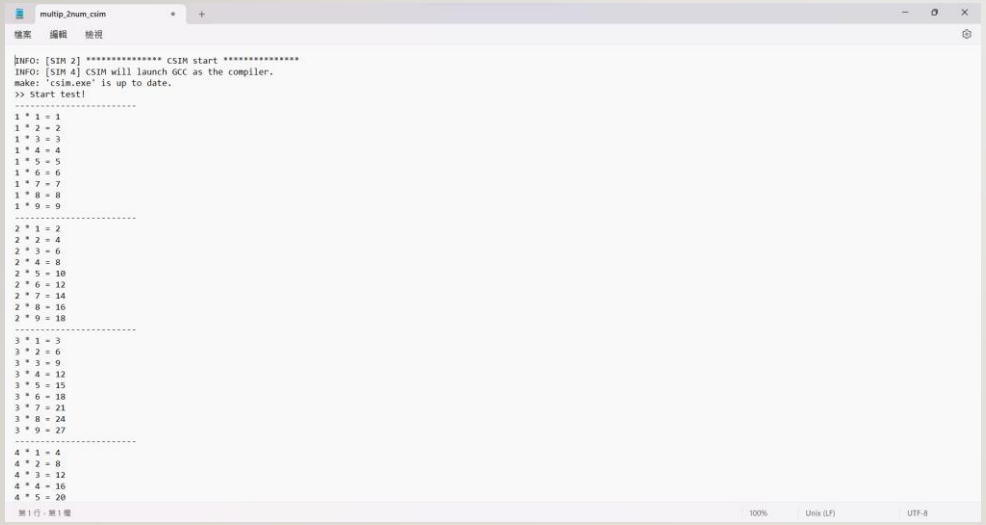
▾ S_AXILITE Registers

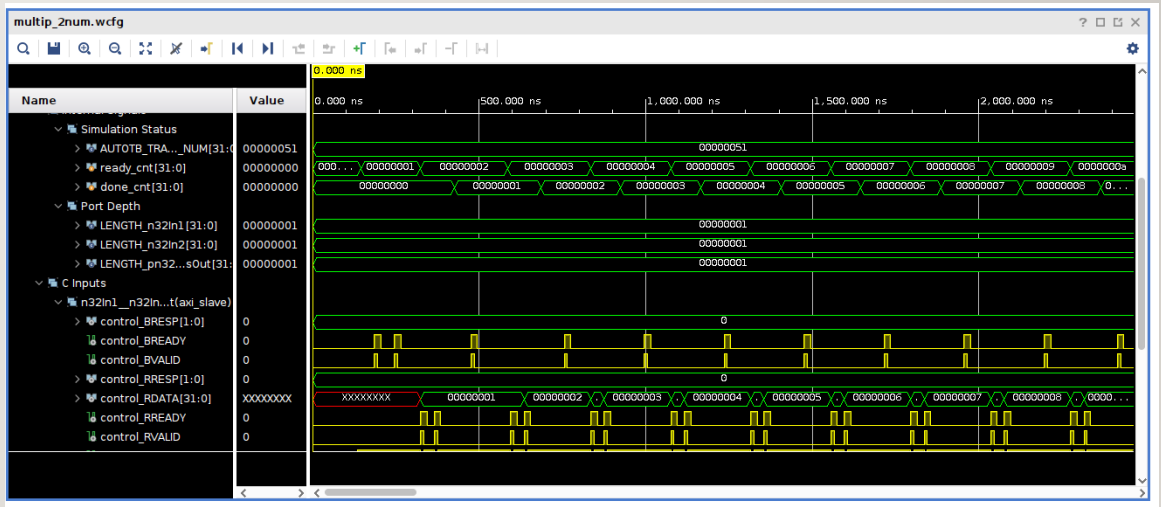
Interface	Register	Offset	Width	Access	Description	Bit Fields
s_axi_control	n32In1	0x10	32	W	Data signal of n32In1	
s_axi_control	n32In2	0x18	32	W	Data signal of n32In2	
s_axi_control	pn32ResOut	0x20	32	R	Data signal of pn32ResOut	
s_axi_control	pn32ResOut_ctrl	0x24	32	R	Control signal of pn32ResOut	0=pn32ResOut_ap_vld

▾ TOP LEVEL CONTROL

Interface	Type	Ports
ap_clk	clock	ap_clk
ap_rst_n	reset	ap_rst_n
ap_ctrl	ap_ctrl_none	

CO-SIMULATION





EXECUTION RESULT

```
Entry: /usr/local/share/pynq-venv/lib/python3.8/site-packages/ipykernel_launcher.py
System argument(s): 3
Start of "/usr/local/share/pynq-venv/lib/python3.8/site-packages/ipykernel_launcher.py"
=========================
1 * 1 = 1
1 * 2 = 2
1 * 3 = 3
1 * 4 = 4
1 * 5 = 5
1 * 6 = 6
1 * 7 = 7
1 * 8 = 8
1 * 9 = 9
=========================
2 * 1 = 2
2 * 2 = 4
2 * 3 = 6
2 * 4 = 8
2 * 5 = 10
2 * 6 = 12
2 * 7 = 14
2 * 8 = 16
2 * 9 = 18
=========================
3 * 1 = 3
3 * 2 = 6
3 * 3 = 9
3 * 4 = 12
3 * 5 = 15
3 * 6 = 18
3 * 7 = 21
3 * 8 = 24
3 * 9 = 27
```

LEARNED

- 使用vitis_hls以及vivado的基本步驟
- 理解各分析結果代表的意義
- 理解ap_ctrl_none與co_simulation衝突的原因
- 使用python code來實現最後的分析結果