**Questions for Course 3**

What are the three kinds of data dependency in pipelining?

What is the false data dependency?

How the data dependency influences the initial interval (II)?

What HLS pragma can specify the loop pipelining? What are the parameters of this pragma?

**Experiments:**

Run the project “pipelined loop.”

Check the run\_hls.tcl file.

There are several solutions: solution1, solution2, solution3.

Check each solution and compare their different.

Q1: what optimizations are in each solution?

Execute the run\_hls.tcl using vitis\_hls, compare the performance of each solutions.

Try to change the clock period in “create\_clock -period 25” to 3, 5, or 10. See the differences.