**EE 214: Digital Circuits Lab**

Homework-1 Submission

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**Q.1.** This zip file contains all the needed files.

Gates.vhdl

add\_sub.vhdl

Full\_Adder.vhdl

DUT.vhdl

Testbench.vhdl

TRACEFILE.txt

**Q.2.** Effect of different values of M on the functionality of a given circuit:

1. For M=1, the circuit behaves like a 4-bit ripple carry subtractor

2. For M=0, the circuit behaves like a 4-bit ripple carry adder.

**Q.3.** The simulation folder in this zip file contains the output file generated after RTL and Gate Level Simulation.