Student IDs: 2016400231,2016400111

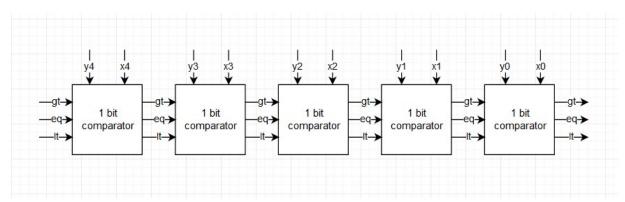
Session ID:21

Group ID:2

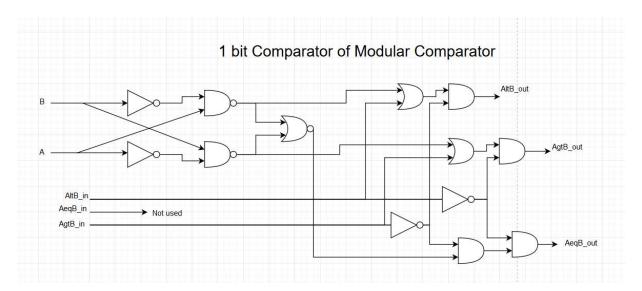
CMPE 240 Experiment 6 Preliminary Work

Step 1: Design circuits with minimum number of components for each function of the ALU

a)

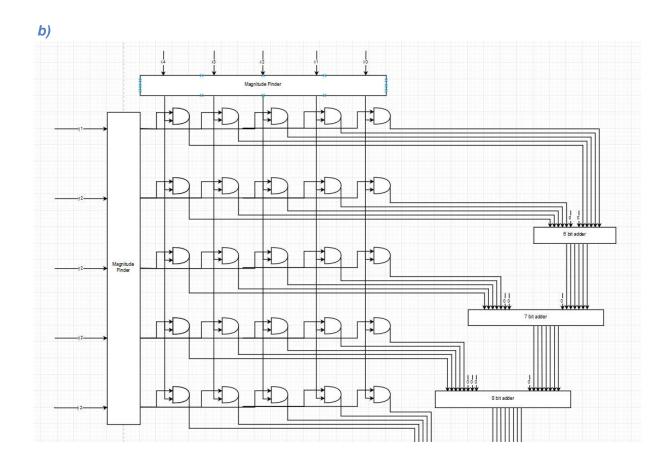


Inside Designs:



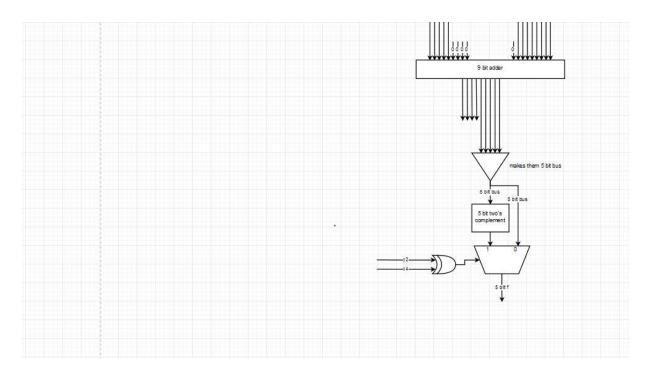
Student IDs: 2016400231,2016400111

Session ID:21

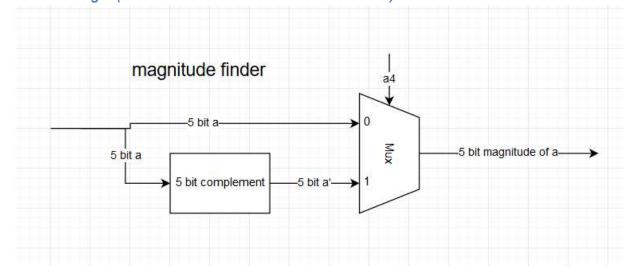


Student IDs: 2016400231,2016400111

Session ID:21



Inside Designs(multi bit adders are defined at section c)

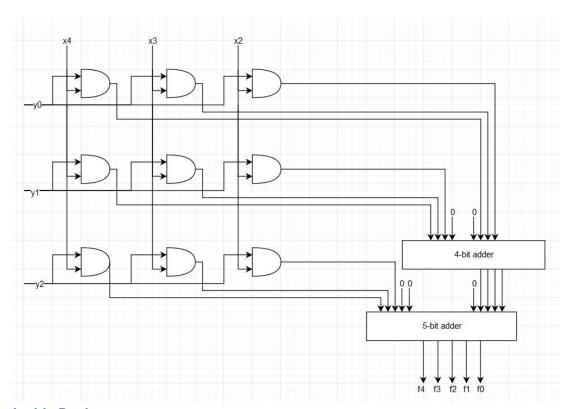


Student IDs: 2016400231,2016400111

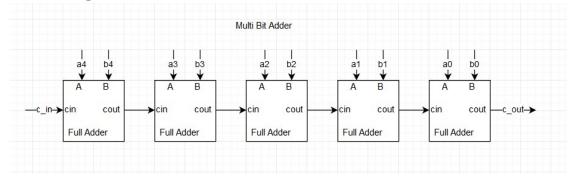
Session ID:21

Group ID:2

c)



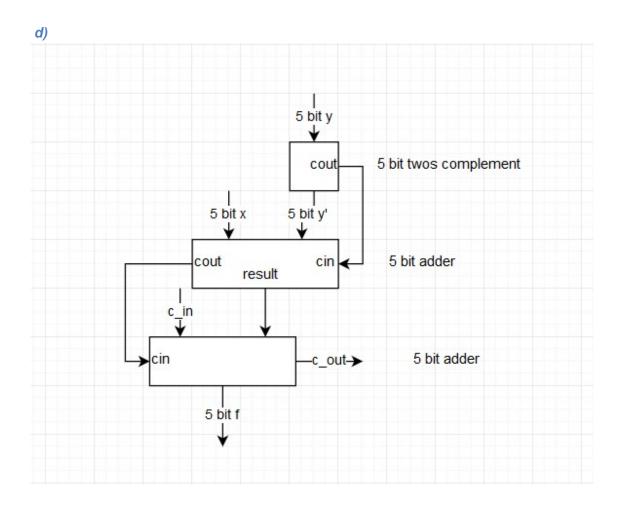
Inside Designs:



Student IDs: 2016400231,2016400111

Session ID:21

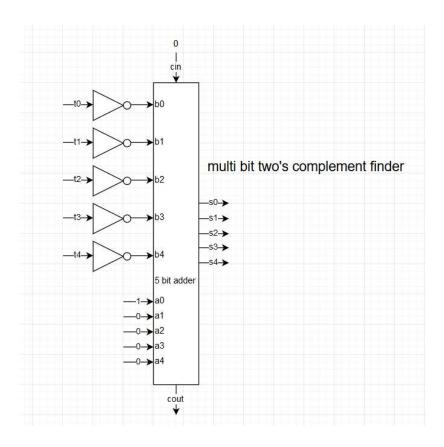
Group ID:2



Inside Designs: (5 bit adders mentioned before)

Student IDs: 2016400231,2016400111

Session ID:21



Step 2: Merge all operations with select inputs and organize outputs, Try to minimize your implementation by using repetitions, draw final circuit as the minimized final design of the ALU.

Student IDs: 2016400231,2016400111

Session ID:21

