Insert this transcript on "transcript" tab on ModelSim. Don't forget to plug the outputs: "HEX(1)", "HEX(0)", "LEDR", and inputs: "SW", "KEY(0)", "KEY(1)", "CLOCK".

This transcript is capable of using the XOR and then the SUM operation of the calculator.

**10** represents the XOR operation, so notice that **10** 00110001 OR **10** 00100000 becomes 00 00010001. Afterwards, notice that **00** represents the SUM operation and that **00** 01000001 + **00** 00001001 = 00 01001010.

restart -f -nolist -nolog -nobreak -novirtuals -noassertions -nofcovers -noatv

force -freeze sim:/top\_calc/CLOCK 1 0, 0 {5 ps} -r 10

force -freeze sim:/top\_calc/KEY(0) 0 10

force -freeze sim:/top\_calc/KEY(1) 0 10

force -freeze sim:/top\_calc/KEY(0) 1 20

force -freeze sim:/top\_calc/KEY(1) 0 20

force -freeze sim:/top\_calc/KEY(1) 1 30

force -freeze sim:/top\_calc/SW 1000110001 40

force -freeze sim:/top\_calc/KEY(1) 0 40

force -freeze sim:/top\_calc/SW 1000100000 50

force -freeze sim:/top\_calc/KEY(0) 0 80

force -freeze sim:/top\_calc/KEY(1) 0 80

force -freeze sim:/top\_calc/KEY(0) 1 90

force -freeze sim:/top\_calc/KEY(1) 0 90

force -freeze sim:/top\_calc/KEY(1) 1 100

force -freeze sim:/top\_calc/SW 0001000001 110

force -freeze sim:/top\_calc/KEY(1) 0 110

force -freeze sim:/top\_calc/SW 0000001001 120