

1. Design a circuit that will do the following:
 - i . add if both numbers are same
 - ii. sub if both numbers are different

 2. Design a circuit that will do the following:
 - i . sub if both numbers are same
 - ii. add if both numbers are different

 3. Design a Half adder using a decoder.
 4. Draw the circuit diagram of a 4 X 16 decoder.
 5. Design a 5x32 decoder using only 3X8 decoder(s)
 6. Design a 13-person voting system using only 3-bit parallel adder(s).
- Note: You must mention MSB and LSB wherever necessary.