**Digital Electronics Project Report**

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**Thus far**:

1. We setup a Demux coupled with the Mux and gave sine wave as an input to the mux.
2. The output of the Mux was connected to input of the Demux.
3. The selecting lines were given with the same input.
4. The output was analysed with the oscilloscope whether the sine wave input and the output were resembling same or not.

**The file is attached below**:

The **Mux** used here is a **74151 IC** and the **Demux** used here is **4051 IC** with an oscilloscope simulated on proteus.

**Next Step**:

1. We will add ADC conversion to the circuit.
2. We will also try adding Pseudo Random Number Generator thereafter.

The Circuit Diagram is as shown in the Figure below:

* The sine wave is given with a frequency of 200 Hz while the selecting lines frequency is given 4k,2k,1k Hz
* We have used 2 DSO to observe the output of the Demux and have attached the same to the file



