Task 5

Develop a Verilog HDL code that will scroll the eight LEDs with a specified pattern at frequency of 1 Hz. The LED scroll pattern will be chosen via switches, which are inputs to the FPGA. There is an additional switch called LED_EN that needs to be '1' to turn on the LED scroll. Implement this design on Altera DE2-115 FPGA Kit using Quartus II.

Enable	Switch 1	Switch 2	LED Scroll Pattern
0	-	-	Disabled
1	0	0	One LED forward
1	0	1	Alternate two LED's Forward
1	1	1	Alternate two LED's Reverse