Problem 1
Using D flip-flops, design a counter with the following repeated binary sequence 1, 3, 5, 7. Assign the sequence as state values.

Problem 2
Using D flip-flops, design a counter with the following repeated binary sequence 1, 3, 5, 7. Assign the sequence as output values.

Problem 3
Using D flip-flops, design a counter with the following repeated binary sequence 1, 3, 5, 7 when input $X = 1$ and the reverse sequence when $X = 0$. Assign the sequence as state values.