1 – Create VHDL code and RTL for a D-FF with asynchronous resetb and synchronous set. Follow all best practices.
 20pts

2 – Create VHDL code and RTL for a JK-FF with synchronous resetb and asynchronous set. Follow all best practices. 30pts

3 – Create VHDL code and RTL for a special new FlipFlop you have conceived of

 this is a normal D-FF (with async rstb) but has a second data input called
 Toggle(T). When T is low, the DFF operates normally, when T is high, the
 DFF ignores the D input and synchronously toggles the output. Follow all best practices.