homework 1 solution

1. An ASCII file that describes the components used in a design and how they are interconnected.
2. The HDL only describes the circuit's functionality. The synthesizer takes the HDL as input but also a component library as input. The synthesizer does the technology mapping.
3. To determine the function (behavior) of a circuit described by an HDL for specified inputs.
4. The HDL describes the circuit to be synthesized. The component library indicates what components are available for the design. The user constraint file indicates any design restrictions/constraints such as timing, pinouts, etc.
5. It is the process to take a design from a specification to production of a programmed part. The design flow identifies all of the steps required to do that.
6. Syntax tells you the rules for creating valid program statements. The semantics tells you the meaning of a syntactically correct statement.
7. 8'b01011101 or 8'B01011101. I will also accept 8'd93 or 8'D93