

CIS4930.002
VLSI Design Automation
Summer C – 2015

Homework 1

Due: *Saturday, May 16th, 2015*
Submit PDF to Canvas by 11:59 PM

All Problems are worth 20pts unless otherwise specified

- (1) In your own words, define Design Automation.
Why is Design Automation important?

- (2) What is High-Level Synthesis? How does it relate to Design Automation?

- (3) What are the 6 types of layout styles?
Briefly describe and illustrate, with an example, each style.

- (4) What are the 7 subdivisions of problems in VLSI Physical Design?
Briefly describe each problem.

- (5) Complete the table below.

Design Style	Application	Design Time	Fab Effort	Cost	Performance
Full Custom					
Gate Array					
Standard Cell					
Macro-Cell					
FPGA					
