CIS 206 – WINTER 2018

Cover page for “Functions Lab” program.

Part 1 : due 9 March 2018
____ (5 points) Demonstrate to a TA that your program prints out the domain, codomain and
relation in correct set notation, on or before 9 March, for at least one of the given input files.

T.A. sign here ___________________________ Date: __________________

Part 2 : due 16 March 2018
____ Show the TA where your program reads in the domain and codomain. (2 points)
____ Explain to the TA how you store the ordered pairs, and justify your design decision.
  (2 points)
____ Show the TA how you format the sets when you print them out. How do you suppress the
  final comma? (2 points)
____ Explain your algorithm for determining whether a relation is a function or not. (3 points)
____ Explain your algorithm for determining whether a function is onto or not. (3 points)
____ Explain your algorithm for determining whether a function is one-to-one or not. (3 points)
____ Explain your algorithm for determining whether a function is a bijection or not. (3 points)
____ Your program produces the correct output for batch 0. (3 points)
____ Your program produces the correct output for batch 1. (2 points)
____ Your program produces the correct output for batch 2. (2 points)
____ Your program produces the correct output for batch 3. (2 points)
____ Your program produces the correct output for the TA’s batch. (3 points)
____ Source code uses consistent indentation. (2 points)
____ Each major section of the source code contains explanatory comments. (2 points)
____ Show the TA that you uploaded your source code to Canvas. (1 point)

POINTS EARNED: __________
POINTS POSSIBLE: 40

T.A. Name __________________________________________
T.A. Signature __________________________________________
(T.A. will not sign until you sign below!)

I certify that I completed this assignment on the date above. I also certify that I did all my own
work. I did not copy someone else’s code, including off the Internet. I know what each line of
code does, and I can reproduce it in a test situation.

Student’s signature __________________________________________