CSI 519 — Fall 2018: Homework 5

Due: October 22 at the beginning of class.

Answer all questions on your own. Write your preferred e-mail address (e.g. zz6000@albany.edu). If you are using more than one sheet of paper, make sure that you staple all the sheets together.

Remember that collaboration of any kind is not allowed.

1. Use PT given in class to check whether the following expression is type correct.

   \[ fn (y) => (let \text{val} \ x = y \ in \ (y \ (fn \ (z) => z)) \ end) \]

   Explain all steps clearly.

2. Use PT (extended) given in class to check whether the following expression is type correct.

   \[ fn \ (y) => (let \text{fun} \ f(x) = (x \ 2) \ in \ f(f(y)) \ end) \]

   Explain all steps clearly.

Neatness counts!