CIS 120 Quiz 1

January 21–22, 2015

Name: ____________________________________________________________

PennKey (e.g. mkizner): _____________________________ Section: _______________________

Indicate the section you’re registered for, even if you’re attending a different section.

*This is a 12-minute quiz.*

1. What year are you?
   - □ Freshman
   - □ Sophomore
   - □ Junior
   - □ Senior
   - □ Other: __________________________

2. Did you take any of these courses?
   - □ CIS 110
   - □ CIS 160
   - □ AP Computer Science A

3. Briefly describe any programming experience you have besides those courses.
   __________________________________________________________________________
   __________________________________________________________________________

4. Have you started the homework?
   - □ Yes
   - □ No

5. Looked at it, maybe...?
   - □ Yes
   - □ No

6. Did you *at least* set up OCaml and OcaIDE on your computer? (Go to office hours if you need help!)
   - □ Yes
   - □ No

7. Okay, but have you registered your clicker?
   - □ Yes
   - □ No
8. Write a program in a programming language of your choice which, for each number from 1 to 100 (inclusive), prints:

- **Fizz** if the number is divisible by 3.
- **Buzz** if the number is divisible by 5.
- **FizzBuzz** if the number is divisible by both 3 and 5.
- The number itself if it is divisible by neither 3 nor 5.

Don’t worry too much about syntax.

9. What language is this program written in? 

10. Write the type of each of the following OCaml expressions in the first blank provided, or *ill-typed* if the expression does not type check. Then, after the ⇒ symbol, write the most simplified value of the expression, or leave it blank if it’s ill-typed. We have done the first one for you as an example.

(a) let a : ______ int _______ = 3 + 4 ⇒ _______ 7 _______
(b) let b : _______ = a = 8 ⇒ _______
(c) let c : _______ = 5 / 4 ⇒ _______
(d) let d : _______ = "hello " + "world" ⇒ _______
(e) let e : _______ = if a > 0 then "positive" ⇒ _______
(f) let f : _______ = if a > 0 then "positive"
else "negative" ⇒ _______
(g) let g : _______ = if a > 0 then 42 else 41.5 ⇒ _______
(h) let h : _______ = let q = 3 <> 4 in
(not q) && (a = 7) ⇒ _______