QUIZ!
Use a full sheet of 8½x11" paper. (Half sheet? Half credit!)

Put **only your last name** in the **far upper left hand corner** of the sheet, where a staple would hit it. It's OK to write **BIG**, just start in the corner!

Avoid a ½-point deduction!

Keep answers short! Avoid full sentences. Feel free to abbreviate.

7 questions; 3 minutes; 4 points. Plus a ½ point E.C. question.

Numbering responses may help you avoid overlooking a question. You may go ahead and number your paper.

For questions with code, assume it's Ruby code.
1. What's a fundamental characteristic of a statically typed language? (one point)

2. Name a language that uses static typing.

3. Name a language that uses dynamic typing.

4. Assuming \( s = "abcdef" \), what's the value of \( s[1,3] \)?

5. Assuming \( s = "abcd" \), what's the value of \( s[1..-1] \)?

6. What's a key difference between Ruby arrays and Haskell lists?

7. What program provides a REPL for Ruby?

EC: Who invented Ruby?
Solutions

1. **What's a fundamental characteristic of a statically typed language?** (one point)
   
   The type of every expression can be determined without running the code.

2. **Name a language that uses static typing.** Java, Haskell, C

3. **Name a language that uses dynamic typing.** Ruby, Python, Icon

4. **Assuming** $s = "abcdef"$, what's the value of $s[1,3]$? "bcd"

5. **Assuming** $s = "abcd"$, what's the value of $s[1..-1]$? "bcd"

6. **What's a key difference between Ruby arrays and Haskell lists?**
   
   Ruby arrays are heterogeneous—they can hold a mix of types.

7. **What program provides a REPL for Ruby?** `irb`

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EC: *Who invented Ruby? Yukihiro Matsumoto ("Matz" ok!)*