

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!

Mitchell

AVOID A ½-POINT DEDUCTION!

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

3 questions; 4 minutes; 2 + 1½ + ½ points. Plus a ½-point EC.

(First question is 2 points; 2nd is 1½ points.)

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

Quiz 9, March 22, 2016

4 minutes; 2 + 1½ + ½ points

1. In English, describe strings that are matched by this Ruby regular expression: `/^[xyz]+[abc]?\d{2,3}/`
2. Write a definition for a Ruby class named **x**. Instances of **x** are created by specifying a string, like `x.new("abc")`. **x** has one method, named **f**, that returns the length of the string that the instance was created with.
3. The line `attr_reader :x` in a class definition specifies that there should be a getter for the instance variable **x**. What's especially interesting about `attr_reader`?

EC ½ point: Briefly, what's the difference between a language being extensible vs. being mutable?

Solutions

1. Describe strings matched by `/^[xyz]+[abc]?\d{2,3}/`

Starts with one or more occurrences of **x**, **y**, or **z**; followed by an optional **a**, **b**, or **c**; followed by two or three digits.

2. Write a definition for a Ruby class named **X**. ...

```
class X  
  def initialize s  
    @f = s.size  
  end  
  attr_reader :f  
end
```

3. The line "**attr_reader :x**" in a class definition specifies that there should be a getter for the instance variable **x**. What's especially interesting about **attr_reader**?

attr_reader is a method that generates a getter method.

EC ½ point: If a language is mutable, the meanings of operations can be changed, where extensibility only allows for providing meaning for previously undefined operations.