

CMSC330 Spring 2012 Quiz #1 Solutions

1. (6 pts) What is the output (if any) of the following Ruby programs? Write FAIL if code does not execute.

- a. (2 pts) `a = "foodie"` **# Output = oo**
 `if a =~ /(o+)/ then`
 `puts $1`
 `end`
- b. (2 pts) `a = []` **# Output = FAIL**
 `a["foo"] = "bar"`
 `puts a["foo"]`
- c. (2 pts) `a = { }` **# Output = bar**
 `a["foo"] = "bar"` **nil**
 `puts a["foo"]`
 `puts a["bar"]`

2. (8 pts) Write a Ruby method *extractNum* that given a string *str*, uses regular expressions and back references to print the first sequence of consecutive digits in the string. For instance, `extractNum("foo12bar154zed")` should print "12". Print "None" if there are no digits in the input string.

```
def extractNum(str)
  if str =~ /[0-9][0-9]+/     OR     if str =~ /(\\d+)/
    puts $1
  else
    puts "None"
  end
end
```

3. (6 pts) Write a Ruby method *prtStrArray* that given an array of strings *strs*, uses the `Array.each` method and a code block to print out all the strings prefixed by "=". For instance, given the array ["foo", "bar"], your code should print out the following:

```
=foo
=bar
```

```
def prtStrArray(strs)
```

Some helpful functions (not all need to be used)	
<code>a.size</code>	// number of elements in the array
<code>a.each { ... }</code>	// apply code block to each element in array

```
                  strs.each { |x| puts "="+x }     OR     strs.each { |x| puts "=" + x }
end
```