CMSC 330 Quiz 1 Fall 2022

Q1. Ruby

Q1.1. Which of the following are not objects in Ruby?

2, “CMSC330”, nil, class, All of the above are objects

Q1.2. T/F: Ruby variables are declared implicitly. True

Q1.3. Given a function that takes an array as input, fill in the blanks to make the function print the total of the array.

```ruby
def fun(x)
    total = 0 # Blank 1
    x.each { |i| total += i } #Blank 2
    puts total
end
```

Examples:
fun([1, 2, 3]) # prints 6
fun([3, 4, 5]) # prints 12

Q1.4. Consider the following function, which takes a single Proc as a parameter.

```ruby
def fun(p)
    p2 = Proc.new { p.call }
    puts “Inside fun”
    return p2
end
```

Assume that you have a value, pr, is a Proc that would print out “Outside Fun” when called. What output would you observe when calling fun(pr)?

“Inside fun”

Q2. Regular Expressions

Q2.1. Write a regular expression that fully matches with 15 or more characters.

.\{15,\}

Q2.2. Write a regex that would match information with the following properties:

**FORMAT:** “[phone number], [first name], [year]”

- The phone number will be spaced out with –’s (dashes).
• The name’s first letter will be capitalized, followed by any number of lowercase letters
• The year will have 4 digits.
• Make sure to use closures on the phone number, name, and year.

Example of valid information:

123-456-7890, Name, 2022
542-333-4444, A, 2022

/^([0-9]{3})-([0-9]{3})-([0-9]{4}), ([A-Z][a-z]*), ([0-9]{4})$/