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.

```
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.

```
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})\$/