**Group Activity 1A; CS 3060; 02/05/2020**

**Names** of students in your group: Sidney Sanders, Jared Dukat, Hannah Rafeld

Points: 5

**Preparatory Setups:** You are expected to show that you can do the following.

1. Use Ruby on a lab computer (if available). Run “ruby –v” command on command line. Take a screenshot and submit it.
2. Install Ruby on your laptop. Run “ruby –v” command on command line. Take a screenshot and submit it.
3. Install Ruby on an Ubuntu vm on your laptop. Run “ruby –v” command on command line. Take a screenshot and submit it. See *tips* folder on Canvas if you need help in making a VM ready.
4. Connect to csvm14.cs.bgsu.edu via ssh (using putty tool). Your user id is same as your bgsu id. You already got your password. Run “ruby –v” command on command line. Take a screenshot and submit it.

1. Login to <https://gitlab.com> on a browser, which will serve as our git server this semester. Use your user id (hopefully same as your bgsu id) for the login. Take a screenshot and submit it.

**Tasks**: Below we have price information about different items, such as computer, table, pen, and chair.

Item price($)

Computer 400

Board 80

Pen 2

Chair 60

Desk 50

Eraser 3

Light 40

Let’s write some Ruby code to store and process some of the above information. Most of the code is given to you whereas you fill in the missing part.

*Task 1 (3 points): With Array*:

*1A*. Compute the average price of the items. Make the following code work on the *irb* interpreter.

*price = [400, 80, , , , , 40]*

*i = 0*

*sum = 0*

*while i < 7*

*sum += price[ i ]*

*i += 1*

*end*

*avg = sum/i*

*p “average price is #{avg}”*

*1B*. Compute the average price of the items. This time you use another loop construct (other than “*while-end*”). Work on the *irb* interpreter.

*price = [400, 80, , , , , 40]*

*i = 0*

*sum = 0*

*until i == 7*

*sum += price[i]*

*i += 1*

*end*

*avg = sum/i*

*p “average price is #{avg}”*

*1C*. Save your code to a file named task1.rb and run by typing: *ruby task1.rb*

*Task 2 (2 points): With Hash*:

*2A*. Compute the total price of a chair and a desk. Make the following code work on the *irb* interpreter.

*priceMap = {“computer” => 400,*

*“board” => 80,*

*,*

*,*

*,*

*,*

*}*

*chairPrice = priceMap[“chair”]*

*deskPrice = priceMap[“desk”]*

*total = chairPrice + deskPrice*

*p “total price of chair and desk is #{total}”*

*2B*. Save your code to a file named task2.rb and run by typing: *ruby task2.rb*

Bonus Problem (1 point): Compute the average price of the items using the Hash (i.e. priceMap) instead of Array (i.e. price). Hint: priceMap.to\_a[i][1] represents the price of i-th item.

i = 0

sum = 0

while i<7

sum += priceMap.to\_a[i][1]

i += 1

end

avg = sum / 7

p "average of item price is #{avg}"

Task 1 screenshot:

A screenshot of a cell phone

Description automatically generated

Task 2 screenshot(included bonus):

A screenshot of a cell phone

Description automatically generated