 Due by 24^{th} October 2018 at 11am

CMPSC 102
Discrete Structures
Fall 2018

Participation and PointsBack: An opportunity to gain an attendance checkpoint and regain points missed from the Exam

Refer to your notes, slides and sample Python code from this week and other weeks. In particular, follow the python code that we created in class or check on line for interesting pieces of code to help you in your programming.

GitHub Starter Repository

The following link will create a repository which will be used for participation points. For this, we will continue to add new directories and push to this same repository.

Note: Please do not create this repository in another GitHub repository because this will not work and may corrupt your data.

`git clone git@github.com:Allegheny-Computer-Science-102-F2018/cs102_participation.git`

To use this link, please follow the steps below.

- Click on the link and accept the assignment.
- Once the importing task has completed, click on the created assignment link which will take you to your newly created GitHub repository for this lab.
- Clone this repository (bearing your name) and work on the practical locally.
- As you are working on your practical, you are to commit and push regularly. You can use the following commands to add a single file, you must be in the directory where the file is located (or add the path to the file in the command):
  - `git commit <nameOfFile> -m ‘‘Your notes about commit here’’`
  - `git push`

  Alternatively, you can use the following commands to add multiple files from your repository:
  - `git add -A`
  - `git commit -m ‘‘Your notes about commit here’’`
  - `git push`

Summary

In this participation and PointsBack activity, you are to choose two (2) of the problems from exam1 that you missed. You are to fully explore these two problems to explain their concepts (in your own words) and to offer example(s) to explain their importance and to showcase how the concepts may each be used in a creative example. Upon completion and quality of your descriptions of the missed concepts from two exam problems, you may have up to half of the problem points back. Note: These points will appear in your *PostEm* grades under a new column.

Equation to Use

To determine your returning points from missed problems, the following Python equation will be used.

```
pointsBack = int(problemPoints/2)
```

Resources

- **Source File**: `part1/cs102-F2018-part-01-starter/src/concepts.py`
- **Writing File**: `part1/cs102-F2018-part-01-starter/writing/concepts.md`

The listed files will be available to you for this task in the participation directory. Note: We will reusing this repository for subsequent participation points.

Steps to Complete for This PointsBack Task

1. List the problem from the exam.
2. Research and discuss the concepts of the questions to explain their concept. Be concise and factually correct in your discussion. For this step, imagine that you are explaining the concept to someone who has no experience in this area.
3. Explain why this concept is important to computer science
4. Offer example(s) use Python code to illustrate how to use this concept. Note, you may need to offer two examples to illustrate some of the concepts uses.
5. In a few lines: explain what your code sample(s) are doing and be sure to add line comments.
6. If you are already happy with your grade on the exam, then turn in this participation submission for your check-point and add to your writing file that you have no concepts to discuss.

Deliverables

1. Your completed (and working) Python code (`src/fibArm_starter.py`)

```
--. --- / --. . - / .----. . --
```