**Foundations of Computational Biology and Bioinformatics**

**Wednesday, January 29, 2020**

**Practical 1.**

Everyone in class has self-assigned to one of three experience levels:

* Group A: focus on basic usage of unix shell, text editors and brief introduction to python
* Group B: develop basic python programming skills
* Group C: developing python scripts to tackle a few basic bioinformatics tasks

The end point of today's practical is as follows:

If you begin in Group A, B, or C, your end point is to complete the Group C exercises.

In other words, the submission guide for this practical is as follows:

|  |  |
| --- | --- |
| Starting Point | Submission |
| Group A | Group B and Group C exercises |
| Group B | Group B and Group C exercises |
| Group C | Group C exercises |

The due date for your endpoint goal is Friday, February 7 at midnight. You will turn in your work electronically to fcbb2homework@gmail.com. The assignment will be graded Pass/Fail.

Here is a summary of your exercises.

**Group A.**

Work through the following tutorial exercises.

### [Introduction to the UNIX Operating System](http://www.ee.surrey.ac.uk/Teaching/Unix/unixintro.html)

### [Tutorial One](http://www.ee.surrey.ac.uk/Teaching/Unix/unix1.html)

### [Tutorial Two](http://www.ee.surrey.ac.uk/Teaching/Unix/unix2.html)

### [Tutorial Three](http://www.ee.surrey.ac.uk/Teaching/Unix/unix3.html)

### [Tutorial Four](http://www.ee.surrey.ac.uk/Teaching/Unix/unix4.html)

### [Tutorial Five](http://www.ee.surrey.ac.uk/Teaching/Unix/unix5.html)

### [Tutorial Six](http://www.ee.surrey.ac.uk/Teaching/Unix/unix6.html)

Complete the following online multiple-choice quizes.

* [**Quiz 1**](http://www.ch.embnet.org/CoursEMBnet/Exercises/Quiz/quix1.html)
* [**Quiz 2**](http://www.ch.embnet.org/CoursEMBnet/Exercises/Quiz/quix2.html)
* [**Quiz 3**](http://www.ch.embnet.org/CoursEMBnet/Exercises/Quiz/quix3.html)
* [**Quiz 4**](http://www.unm.edu/~consult/quiz/unix1.html)
* [**Quiz 5**](http://www.proprofs.com/quiz-school/story.php?title=basic-unix-command-line-quiz)

Submission for this level: Nothing! We trust that you realize you need to know this material. Please proceed to Group B after completing the steps above.

We are guessing that most of the students in class are comfortable programming in a text editor. If this is not you, come talk to ones of the TAs and Dr. Karchin in class today.

**Group B.**

Download the bundle corresponding to Group B from the course schedule page.

Go through the GroupB-python slides and step through the examples with your team.

Do the exercises in GroupB-python-exercises.

Submission for this level: Copy and paste your functions described on the last page of GroupB-python-exercises into a text file or Word document. These exercises are only graded for completion. Please proceed to Group C after completing the steps above.

**Group C.**

Download the bundle corresponding to Group C from the course schedule page.

Go through the GroupC-python slides and step through the examples with your partner.

Do the exercises in GroupC-python-exercises.

Submission for this level: The four Python scripts described on the last page of GroupC-python-exercises.