# Simulating required teachers for the UW Bothell CSS department

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## Summary of program

The algorithm simulates and tries to answer the problem of how many teachers are required year after year with increasing student population. The steps of the algorithm are as follows:

* Add classes based on student population
* For each full time teacher, randomly find classes to fill their schedule based on expertise.
* For each part time teacher, randomly find classes to fill their schedule based on expertise.
* Decide which teachers deserve a promotion
* Calculate money spent this year
* Calculate profit
* Calculate how many teachers were needed
* Increase population of students
* Repeat 10 times

## How to Run Program

* Download files from <https://github.com/juperez0614/css458finalproject>
* Open up Scheduling\_algorithm\_with\_course\_cruncher.py
* Edit the variables at the top of the file. This includes the download path of the git repository.
* Run the program