For this semester, students are expected to implement the given heuristic for the Facility Location Problem within the scope of IE343 lecture. Problem definition is as follows:

*SimitCo, a pastry company aims to open a certain amount of bakery facilities around Istanbul. Company engineer has found several candidate locations for the facilities and pointed out customers, however, they hesitated to give this long-term decision by themselves. At this point, they have reached you to create a good-performing heuristic. After analysing the situation, you’ve concluded that this is a Facility Location Problem. SimitCo has signed long-term contracts with each customer, so customer data is considered as deterministic. After evaluation of possible algorithms, you have concluded to use the following algorithm:*

**Diagram

Description automatically generatedCode this algorithm by using the packages given. Follow the steps:**

1-Clone the given repository by using Git

2-Code the algorithm by given classes and methods.

3-Push the project code to a private repository, share it with the course TA’s

**Your repository must include several files, which are:**

1-ReadMe.md file that explains the part that is written by you and has the answers for questions asked

2-Exactly same files that is sent to you, if you need to add something for those files, you are expected to explain why you needed to add them and how did you implement.

**Question that you need to answer is:**

1-How does the execution time change when problem size is increased? Report it by running the same algorithm for the given datasets.

How to create Git account:

-Get a github account from github.com

-Check if you already have git by typing terminal:

git --version

-If you don’t have Git, go to <https://git-scm.com/download> and download git for your operating system

-After downloading Git, you need to configurate your account to your local computer by using

git config --global user.name “Your name here”

git config --global user.email “Your email here”

-If you want to check whether if you have username and email configured, type

git config --global --list

To initialize the git repository, go to the terminal and type

git init “Folder name”

By doing these things, you are successful to create your first repository. After creating your first repository, you can clone <https://github.com/berkkarasu/spring-22-project.git>

If you are using VS Code, follow this YouTube video:

<https://www.youtube.com/watch?v=sz2EM-gkEs0>

If you are using Eclipse, follow this YouTube video:

[*https://www.youtube.com/watch?v=uOpug3ie\_h0*](https://www.youtube.com/watch?v=uOpug3ie_h0)

If you are using PyCharm, follow this YouTube video:

<https://www.youtube.com/watch?v=egpbzk5u0xA>

After cloning the repository, don’t forget to push it to the Git, so that we can see your term project.