Name-Surname:＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿＿ ID:＿＿＿＿＿＿＿＿＿＿＿＿＿

Software Engineering Lab

Direction Lab #7

23rd February 2018

1. Follow the instructions in the handout and do your experiment with Github.

2. From your project working copy, you will find the files *animals-th.txt* and *animals-eng.txt* on the Desktop of your PC which contains a list of animals in Thai and English respectively.

Together with the members of your group, classify the animals into six groups and put each group into a separated file:
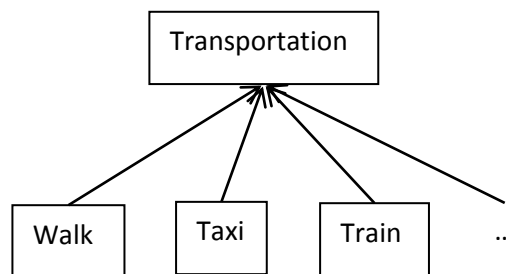
1) mammals.txt for mammals
2) birds.txt for birds
3) fish.txt for fishes
4) reptiles.txt for reptiles
5) amphibians.txt for amphibians
6) insect.txt for insects

The list of animals in each file must be sorted alphabetically.

3. Work as a team to accomplish the following tasks:

- In your PC, you will find the folder "Polymorphism" on the Desktop which contains incomplete Python programs, for the project members, with which when they are corrected and put together the whole programs can calculate cost of any type of transportation.
- **Transportation** is an *abstract* class whose *concrete* classes are **Walk**, **Taxi**, **Train**, and so on.
- Transportation has **three** properties **start_place**, **end_place**, and **distance**.
- For each transportation cost, **Walk** has no cost for any distance, while Taxi charges its passenger 40 Bahts per Kilometer. The traveling by train will cost 5 Bahts for each station.
- The class diagram showing inheritance relationships in the program is as shown below:

Distribute one or two files to your team members, complete this exercise by each member corrects all errors in his/her programs so that when put together the whole programs can correctly calculate the transportation cost.

For example, If you travel from KMITL to the British Council, the summary of your transportation activities will be like shown below. For each concrete class, define method **find_cost()** to calculate cost for each object of the class.

Traveling	Start	End	Distance	Numbers of Stations
walk	KMITL	KMITL SCB Bank	0.6 km	-
taxi	KMITL SCB Bank	Ladkrabang Station	5 km	-
train	Ladkrabang Station	Payathai Station	40 km	6
taxi	Payathai Station	The British Council	3 km	-