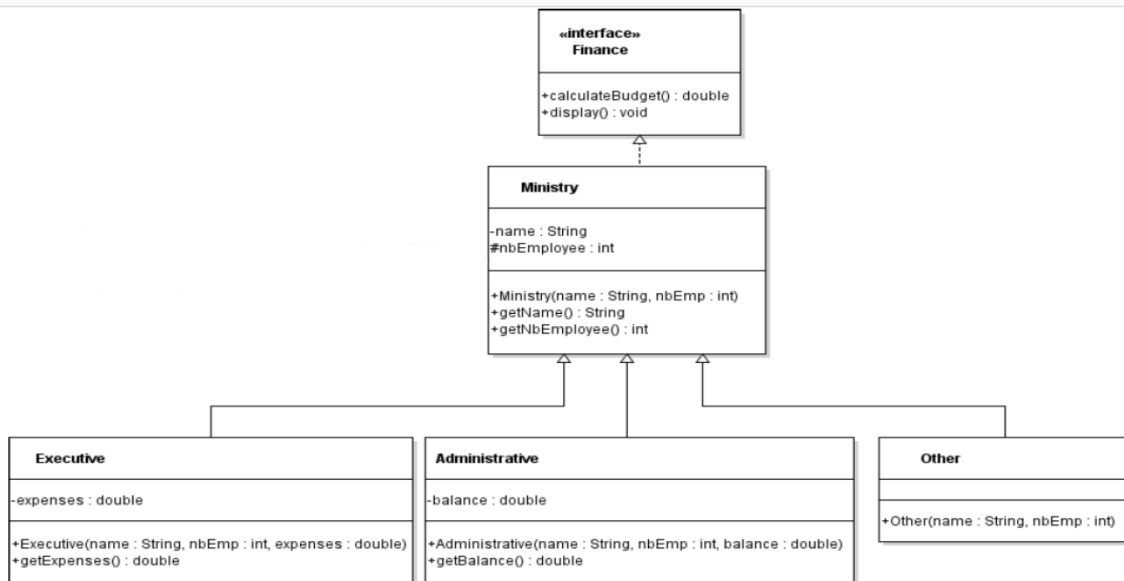




King Saud University
College of Computer and Information Systems
Department of Computer Science
CSC 113: Java Programming-II



Tutorial: **Abstract Methods and Interface**



Finance interface:

- Methods:
 - **calculateBudget ()**: This method calculates and returns the budget of a Ministry. The budget of a Ministry is calculated as follows:
 - **Executive**:
 $Budget = expenses + nbEmployee * 1.5$
 - **Administrative**:
 $Budget = nbEmployee * 10000 - balance.$
 - **Other**:
 $Budget = nbEmployee * 10000.$
 - **display()**: display all the attributes

Ministry class:

- Attributes:
 - **name**: the name of the ministry.
 - **nbEmployee**: number of employees in the ministry
- Methods:
 - **Ministry(name: String, nbEmp: int)**: constructor
 - **getName ()**: this method returns the name of the ministry.
 - **getNbEmployee ()**: this method returns the number of employees of the ministry.

Executive class

- Attributes:
 - ***expenses***: the expenses of the ministry.
- Methods:
 - ***Executive(name: String, nbEmp : int, expenses : double)***: constructor.
 - ***getExpenses()***: this method returns the amount of expenses.

Administrative class:

- Attributes:
 - ***balance***: the basic salary allocated for the role.
- Methods:
 - ***Administrative(name: String , nbEmp : int, balance : double)***: constructor.
 - ***getBalance ()***: This method returns the balance of the administrative ministry.

Other class:

- Methods:
 - ***Other(name: String , nbEmp : int)***: constructor.

QUESTION: Translate into Java code the following. We assume the remaining classes are available.

- The interface ***Finance***.
- The class ***Ministry***.
- The class ***Executive***.