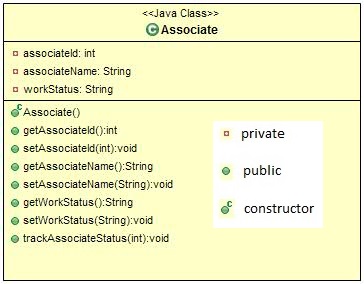
**DreamTek Company**

DreamTek Company provides an initial training for all its employees, once they join the company.

During the training phase they call the employees as “Associate”. The initial training is conducted for 60 days for each Associate. In these 60 days they learn various technologies.

The first **20 days** they learn “**Core skills**”, the **next 20 days** they learn **“Advanced modules”** and the **final 20 days** they go to the **“Project phase”**. Help the DreamTek Company to find in which phase the associates are in.

Consider the below class:



In the Associate class include the given attributes and methods with the access specifiers as specified in the class diagram.

The setter methods are used to set the value and the getter methods are used to retrieve the value.

The trackAssociateStatus method takes the number of days as argument and sets the work status of the associate based on the number of days. If the number of days is greater than 60 days then set the work status as “Deployed in project”.

In the Main class, create an object for the Associate class; Get the details as shown in the sample input and assign the value for its attributes using the setters. Invoke the trackAssociateStatus method and find the work status and display the details as shown in the sample output.

Sample Input1:

Enter the associate id:

123

Enter the associate name:

john

Enter the number of days:

45

Sample Output1:

The associate john work status:Project phase

Sample Input2:

Enter the associate id:

124

Enter the associate name:

ram

Enter the number of days:

70

Sample Output2:

The associate ram work status: Deployed in project

# Student Details - Constructor

Create a class Student with the private attributes

* int studentId
* String studentName, studentAddress, collegeName.

Include appropriate getter methods.

Write 2 constructors for the Student class based on the below assumptions.

Assume most of the students are from “NIT” college. So user has to give input whether the student is from NIT or not.

If student belongs to NIT, give input as 'yes/YES' and skip input for the attribute collegeName and create student object with 3-argument constructor to initilze the values for studentId, studentName and studentAddress and collegeName as “NIT”.

If student belongs to other college, give input as 'no/NO' and get college name from the user and create student object with 4-argument constructor to initialize all the values.

Instead of Yes / No, if user enters different input then display 'Wrong Input' and get the input again. Based on the above assumptions write the necessary constructors in the Student class.

Write a class StudentMain with the main method and test the application.

Get all the input needed from the main method.

Sample Input 1:

Enter Student's Id:

12

Enter Student's Name:

John

Enter Student's address:

Chennai

Whether the student is from NIT(Yes/No):

NO

Enter the college name:

SVS

Sample Output 1:

Student id:12

Student name:John

Address:Chennai

College name:SVS

Sample Input 2:

Enter Student's Id:

43

Enter Student's Name:

Tom

Enter Student's address:

Coimbatore

Whether the student is from NIT(Yes/No):

y

Wrong Input

Whether the student is from NIT(Yes/No):

yes

Sample Output 2:

Student id:43

Student name:Tom

Address:Coimbatore

College name:NIT

Static

**Employee Salary Calculation**

Create a class Employee with the following private member variables.

* int employeeId
* String employeeName
* double salary
* double netSalary

Include appropriate getters and setters method in Employee class. Write the following method in the Employee class:

public void calculateNetSalary(int pfpercentage) - This method should take PF percentage as argument. Deduct the PF amount from the salary and set the netSalary.

Create a Main class which has the main method which invokes the method to get the input and prints the details as shown in the sample.

Also write a method :

* public static Employee getEmployeeDetails() - which gets the employee details - id, name and salary, and returns the employee object.
* public static int getPFPercentage() - which gets the PF percentage and returns the same

In the main method invoke the above two methods, and then call the calculateNetSalary method in Employee class and print the output as shown below.

Sample Input 1:

Enter Id:

101

Enter Name:

Vivek

Enter salary:

20000

Enter PF percentage:

7

Sample Output 1:

Id : 101

Name : Vivek

Salary : 20000.0

Net Salary : 18600.0

**Ticket Price Calculation - Static**

Create a class Ticket with the following private variables

* int ticketid;
* int price;
* static int availableTickets;

Include getters and setters methods in the Ticket class.

AvailableTickets should hold only positive value. Zero and negative values are not allowed.(This logic should be checked inside the corresponding setter method)

Write the following method in the Ticket class:

public int calculateTicketCost(int nooftickets) —this method should check the ticket availability, If the tickets are available, **reduce the nooftickets from availableTickets** and calculate the total amount as **nooftickets\*price** and return the total amount. If the tickets are **not available**, this method should **return -1.**

Write a main method in the Main class to test the application.

Sample input and output

Enter no of bookings:

2

Enter the available tickets:

25

Enter the ticketid:

123

Enter the price:

100

Enter the no of tickets:

5

Available tickets: 25

Total amount:500

Available ticket after booking:20

Enter the ticketid:

124

Enter the price:

100

Enter the no of tickets:

2

Available tickets: 20

Total amount:200

Available ticket after booking:18