



Java 9 & 10

Assignment: Real Time Examples {OOP Java}

Week: 1

=====

Instructions:

- Complete this assignment in next 48 hours.
 - Submit the solution to your leaders.
 - Ask for help to your leaders if it is really a need.
- =====

{Note: The Problem Statements given below are some real time scenarios mapped with OOP concepts from java, you have to write a program around it}

Program 1. Army is composed of cavalry and infantry. Write a class called Army, in class Army create and store object of infantry.

While creating infantry object, write infantry class' parametrised constructor to accept quantity of infantry soldiers.

Create the infantry object and access the number of soldiers.

Program 2. The dessert cake is 'composed of' egg, chocolate and cream. Create a class called cake and in class cake, create objects of egg, chocolate and cream. While creating objects of egg, chocolate and cream pass amount of calories accumulated in egg, chocolate and cream via constructor. And then, find total number of calories in cake.

Program 3. A group of ants is called colony. Write a class called colony which has an array, that will store 5 Ant class objects. Print address of all ant objects stored in array.

Program 4. A country is composed of states, states are composed of cities. Write a real time example to accommodate 2 state class objects in country class.

Those two state class objects will accommodate 2 objects(each) of city class.

Example

Class USA stores objects of North Carolina and North Dakota

North Carolina stores objects of 'Elizabeth city' and Rocky mount

North Dakota stores objects of 'Watford city' and 'valley city'.

Fit names of states and cities using parametrised constructor of state class and city class.

Later access and print those names

You can write your own example.



Java 9 & 10

Program 5. Write a class called text editor and write a parametrised constructor for it.

class TextEditor(String textEditorName, String creator). Make 3 objects called atom, sublime and vim

and store the editor name, creator name using parametrised constructor in a class called PunchingCard.

And access those names.

Program 6. A building is composed of iron rod, cement and bricks.

Your dad has assigned you a task to store prices for various materials brought for your new house construction.

Create a class called Material(String materialName, double price). Create 3 objects of material class called

ironRod, cement and bricks. And pass suitable arguments to each constructor. Later find out total cost in house construction.