Assignments on Design Patterns

1. Use the following class to implement a Factory pattern:

**public** **abstract** **class** Job {

**public** **abstract** String getJobDescription();

}

1. Create sub classes of Job as Developer, Accountant, Sales and Operations.
2. Create a class Named JobFactory and define getJob Factory method with a String jobDesc as parameter.
3. When you pass “acc” it returns Account Object, when you pass “dev” it must return Developer Object and so on for other classes.
4. Create a Main class with main(…) method to demonstrate the applications working.
5. Create the following classes:

**abstract class** Pet{  
 **public abstract** String petDetails();  
}  
Create Pets like Cat, Dog,Fox, Lion etc as subclasses of Pet

**public class** PetFactory{  
   
 **public** Pet createPet(String petType){  
 **return //“returns one object of a particular Pet”** }  
}

Implement the above a Factory Design pattern.

1. Consider the following class:

**public class** Computer{  
   
 String memory;  
 String processor;  
 String powerSupply;  
 String monitor;  
 String keyboard;  
 String speakers;  
 String mouse;  
   
}

Implement builder pattern for the Computer.

1. There is a heater operated remotely through commands. Implement the command pattern for the HeatingSystem.

**public class** HeatingSystem {  
  
 **public void** heatOn() {  
 System.*out*.println(**"Turned on heat"**);  
 }  
  
 **public void** heatOff() {  
 System.*out*.println(**"Turned off heat"**);  
 }  
}