

Theory Questions

- a) Describe briefly the fundamental characteristics of Structural design patterns.
- b) What is the difference between an Abstract and Concrete class?
- c) Distinguish clearly between class inheritance and interface inheritance.
- d) What is the intent of the Adapter design pattern?
- e) What is the intent of the Decorator design pattern

Practical Work:

- f) Get the code for adapter and decorator in resources up and running and comment it to show you understand it.
- g) Using the code provided in resources and the lecture notes this week, write a Java code implementation where output from the **main()** method in the **Client** class should look as follows:

```
Text object show()  
design-patterns.com
```

```
Http decorated text show()  
http://www.design-patterns.com
```

```
Ftp decorated text show()  
ftp.design-patterns.com
```

```
Https decorated text show()  
https://www.design-patterns.com
```