

Unit 13 - Week 11 :

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Assignment 11

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

Due on 2020-12-02, 23:59 IST.

- 1)

Which of the following describes the Adapter pattern correctly?
a. This pattern builds a complex object using simple objects using a step by step approach.
b. This pattern addresses efficiently creating duplicate objects.
c. This pattern works as a bridge between two incompatible interfaces.
d. This pattern is used when we need to decouple an abstraction from its implementation so that the two can vary independently.

☐ a.
☐ b.
☐ c.
☐ d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
c.
- 2)

Which of the following describes the Bridge pattern correctly?
a. This pattern builds a complex object using simple objects using a step by step approach.
b. This pattern addresses efficiently creating duplicate objects.
c. This pattern is used when it is necessary to prevent creation of objects directly to reduce dependencies in the design.
d. This pattern is used when we need to decouple an abstraction from its implementation so that the two can vary independently.

☐ a.
☐ b.
☐ c.
☐ d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
d.
- 3)

Which one of the following statements regarding the adapter pattern is **FALSE**?

a. The class adapter pattern uses inheritance as the main mechanism
b. The object adapter pattern uses delegation as the main mechanism
c. Universal adapters are object adapters
d. Universal adapters are class adapters

☐ a.
☐ b.
☐ c.
☐ d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
d.
- 4)

Which one of the following is the most accurate class structure for the object adapter pattern?

a. A
b. B
c. C
d. D

☐ a.
☐ b.
☐ c.
☐ d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
b.
- 5)

Which one of the following is the most accurate class structure for the class adapter pattern?

a. A
b. B
c. C
d. D

☐ a.
☐ b.
☐ c.
☐ d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
b.
- 6)

Consider the following Java code implementing the class adapter design pattern. The code for the **Target** and **Adaptee** classes is given below.

```
interface Target {  
    public void add();  
}  
class Adaptee {  
    public void insert();  
}
```


Which one of the following is the most appropriate code for the **Adapter** class?

```
class Adapter extends Adaptee implements Target {  
    public void add() { insert();  
}  
class Adapter extends Target implements Adaptee {  
    public void add() { insert();  
}  
class Adapter extends Target implements Adaptee {  
    public void insert() { add();  
}  
class Adapter implements Target {  
    private Adaptee adaptee;  
    public Adapter(Adaptee a) { adaptee = a;  
    public void add() { adaptee.insert();  
}
```


a. A
b. B
c. C
d. D

☐ a.
☐ b.
☐ c.
☐ d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
a.
- 7)

Consider the following Java code implementing the object adapter design pattern. The code for the **Target** and **Adaptee** classes is given below.

```
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    public void add();  
}  
class Adaptee {  
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    public void insert() { add();  
}  
class Adapter implements Target {  
    private Adaptee adaptee;  
    public Adapter(Adaptee a) { adaptee = a;  
    public void add() { adaptee.insert();  
}
```


a. A
b. B
c. C
d. D

☐ a.
☐ b.
☐ c.
☐ d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
d.
- 8)

The bridge design pattern is useful to remedy which one of the following types of problems in a design?

a. Violation of OCP (Open/Closed Principle)
b. Violation of SRP (Single Responsibility Principle)
c. Violation of LSP (Liskov Substitution Principle)
d. Violation of DIP (Dependency Inversion Principle)

☐ a.
☐ b.
☐ c.
☐ d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
b.
- 9)

Suppose the bridge design pattern has been satisfactorily applied to a moderate sized design project. Which one of the following is **FALSE** in this case?

a. Decoupling of abstraction from implementation has been achieved
b. Reduction in the number of sub-classes has been achieved
c. Results in increase in size of executable code
d. Interface and Implementation can be varied independently as required later

☐ a.
☐ b.
☐ c.
☐ d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
c.
- 10)

The following is the class diagram of application of a well-known design pattern.

Name the design pattern.
a. Adapter
b. Decorator
c. State
d. Proxy

☐ a.
☐ b.
☐ c.
☐ d.

No, the answer is incorrect.
Score: 0
Accepted Answers:
d.