Java Beans And JDBC

1 – Java Beans

1. Which of the following is not an Enterprise Beans type?

a) Doubleton

b) Singleton

c) Stateful

d) Stateless

Answer: a

Explanation: Stateful, Stateless and Singleton are session beans.

2. Which of the following is not true about Java beans?

a) Implements java.io.Serializable interface

b) Extends java.io.Serializable class

c) Provides no argument constructor

d) Provides setter and getter methods for its properties

Answer: b

Explanation: java.io.Serializable is not a class. Instead it is an interface. Hence it cannot be extended.

3. Which file separator should be used by MANIFEST file?

a) /

b) \

c) –

d) //

Answer: a

Explanation: MANIFEST file uses classes using / file separator.

4. Which of the following is correct error when loading JAR file with duplicate name?

a) java.io.NullPointerException

b) java.lang.ClassNotFound

c) java.lang.ClassFormatError

d) java.lang.DuplicateClassError

Answer: c

Explanation: java.lang.ClassFormatError: Duplicate Name error is thrown when .class file in the JAR contains a class whose class name is different from the expected name.

5. Java Beans are extremely secured?

a) True

b) False

Answer: b

Explanation: JavaBeans do not add any security features to the Java platform.

6. Which of the following is not a feature of Beans?

a) Introspection

b) Events

c) Persistence

d) Serialization

Answer: d

Explanation: Serialization is not the feature of Java Beans. Introspection, Customization, Events, Properties and Persistence are the features.

7. What is the attribute of java bean to specify scope of bean to have single instance per Spring IOC?

a) prototype

b) singleton

c) request

d) session

Answer: b

Explanation: Singleton scope of bean specifies only one instance per spring IOC container. This is the default scope.

8. Which attribute is used to specify initialization method?

a) init

b) init-method

c) initialization

d) initialization-method

Answer: b

Explanation: init-method is used to specify the initialization method.

<bean id = "helloWorld" class = "com.bean.HelloWorld" init-method = "init" />

9. Which attribute is used to specify destroy method?

a) destroy

b) destroy-method

c) destruction

d) destruction-method

Answer: b

Explanation: destroy-method is used to specify the destruction method.

10. How to specify autowiring by name?

a) @Qualifier

b) @Type

c) @Constructor

d) @Name

Answer: a

Explanation: Different beans of the same class are identified by name.

@Qualifier("student1")

@Autowired

Student student1;

2 – JDBC

1. Which of the following contains both date and time?

a) java.io.date

b) java.sql.date

c) java.util.date

d) java.util.dateTime

Answer: d

Explanation: java.util.date contains both date and time. Whereas, java.sql.date contains only date.

2. Which of the following is advantage of using JDBC connection pool?

a) Slow performance

b) Using more memory

c) Using less memory

d) Better performance

Answer: d

Explanation: Since the JDBC connection takes time to establish. Creating connection at the application start-up and reusing at the time of requirement, helps performance of the application.

3. Which of the following is advantage of using PreparedStatement in Java?

a) Slow performance

b) Encourages SQL injection

c) Prevents SQL injection

d) More memory usage

Answer: c

Explanation: PreparedStatement in Java improves performance and also prevents from SQL injection.

4. Which one of the following contains date information?

a) java.sql.TimeStamp

b) java.sql.Time

c) java.io.Time

d) java.io.TimeStamp

Answer: a

Explanation: java.sql.Time contains only time. Whereas, java.sql.TimeStamp contains both time and date.

5. What does setAutoCommit(false) do?

a) commits transaction after each query

b) explicitly commits transaction

c) does not commit transaction automatically after each query

d) never commits transaction

Answer: c

Explanation: setAutoCommit(false) does not commit transaction automatically after each query. That saves a lot of time of the execution and hence improves performance.

6. Which of the following is used to call stored procedure?

a) Statement

b) PreparedStatement

c) CallableStatment

d) CalledStatement

Answer: c

Explanation: CallableStatement is used in JDBC to call stored procedure from Java program.

7. Which of the following is used to limit the number of rows returned?

a) setMaxRows(int i)

b) setMinRows(int i)

c) getMaxrows(int i)

d) getMinRows(int i)

Answer: a

Explanation: setMaxRows(int i) method is used to limit the number of rows that the database returns from the query.

8. Which of the following is method of JDBC batch process?

a) setBatch()

b) deleteBatch()

c) removeBatch()

d) addBatch()

Answer: d

Explanation: addBatch() is a method of JDBC batch process. It is faster in processing than executing one statement at a time.

9. Which of the following is used to rollback a JDBC transaction?

a) rollback()

b) rollforward()

c) deleteTransaction()

d) RemoveTransaction()

Answer: a

Explanation: rollback() method is used to rollback the transaction. It will rollback all the changes made by the transaction.

10. Which of the following is not a JDBC connection isolation levels?

a) TRANSACTION\_NONE

b) TRANSACTION\_READ\_COMMITTED

c) TRANSACTION\_REPEATABLE\_READ

d) TRANSACTION\_NONREPEATABLE\_READ

Answer: d

Explanation: TRANSACTION\_NONREPEATABLE\_READ is not a JDBC connection isolation level.

3 – Java Design Patterns

1. Which of the below is not a valid design pattern?

a) Singleton

b) Factory

c) Command

d) Java

Answer: d

Explanation: Design pattern is a general repeatable solution to a commonly occurring problem in software design. There are various patterns available for use in day to day coding problems.

2. Which of the below author is not a part of GOF (Gang of Four)?

a) Erich Gamma

b) Gang Pattern

c) Richard Helm

d) Ralph Johnson

Answer: b

Explanation: Four authors named Richard Helm, Erich Gamma, Ralph Johnson and John Vlissides published a book on design patterns. This book initiated the concept of Design Pattern in Software development. They are known as Gang of Four (GOF).

3. Which of the below is not a valid classification of design pattern?

a) Creational patterns

b) Structural patterns

c) Behavioural patterns

d) Java patterns

Answer: d

Explanation: Java patterns is not a valid classification of design patterns. The correct one is J2EE patterns.

4. Which design pattern provides a single class which provides simplified methods required by client and delegates call to those methods?

a) Adapter pattern

b) Builder pattern

c) Facade pattern

d) Prototype pattern

Answer: c

Explanation: Facade pattern hides the complexities of the system and provides an interface to the client using which client can access the system.

5. Which design pattern ensures that only one object of particular class gets created?

a) Singleton pattern

b) Filter pattern

c) State pattern

d) Bridge pattern

View Answer

Answer: a

Explanation: Singleton pattern involves a single class which is responsible to create an object while making sure that only one object gets created. This class provides a way to access the only object which can be accessed directly without need to instantiate another object of the same class.

6. Which design pattern suggests multiple classes through which request is passed and multiple but only relevant classes carry out operations on the request?

a) Singleton pattern

b) Chain of responsibility pattern

c) State pattern

d) Bridge pattern

Answer: b

Explanation: Chain of responsibility pattern creates a chain of receiver objects for a particular request. The sender and receiver of a request are decoupled based on the type of request. This pattern is one of the behavioral patterns.

7. Which design pattern represents a way to access all the objects in a collection?

a) Iterator pattern

b) Facade pattern

c) Builder pattern

d) Bridge pattern

Answer: a

Explanation: Iterator pattern represents a way to access the elements of a collection object in sequential manner without the need to know its underlying representation.

8. What does MVC pattern stands for?

a) Mock View Control

b) Model view Controller

c) Mock View Class

d) Model View Class

Answer: b

Explanation: Model represents an object or JAVA POJO carrying data.View represents the visualization of the data that model contains. The controller acts on both model and view. It is usually used in web development.

9. Is design pattern a logical concept.

a) True

b) False

Answer: a

Explanation: Design pattern is a logical concept. Various classes and frameworks are provided to enable users to implement these design patterns.

10. Which design pattern works on data and action taken based on data provided?

a) Command pattern

b) Singleton pattern

c) MVC pattern

d) Facade pattern

Answer: a

Explanation: Command pattern is a data driven design pattern. It is a behavioral pattern. A request is wrapped under an object as command and passed to the invoker object. The invoker object looks for the appropriate object which can handle this command and passes this command to the corresponding object which executes the command.