**Hibernate Multiple Choice Questions**

Choose true

1.Hibernate is a framework.

2.Hibernate is an object-relational mapping (ORM) library for the Java language

3.Hibernate provides a mapping for object-oriented domain model to a traditional relational database.

4.All of the above

5.None

1. What is dirty checking in Hibernate?

1. object state changes in order to synchronize the updated state with the database

2. remove the dirty data from data base.

3. check the data when insert into data base.

4. None

2. What is the root level element in a hibernate mapping file?

1. <hibernate-mapping>

2. <session-mapping>

3. <sessionfactory-mapping>

4. none of the above

3. What does "<generator class="native" />" means?

1. generate primary key

2. generate tables based on configuration

3. generate sql statement on configuration

4. None

4. what does addScalar() method does in the below code ?

Double max = (Double) sess.createSQLQuery("select max(cat.weight) as maxWeight from cats cat")

.addScalar("maxWeight", Hibernate.DOUBLE);

.uniqueResult();

1. confirm that maxWeight always be double

2. maxWeight should be double other wise Exception

3. maxWeight may be double or not.

4. None

5. It is possible to declare mappings for multiple classes in one mapping file?

1. true

2. false

3. can't say

4. none of the above

6. What does session.evict() method do?

1. remove the object and its collections from the first level cache

2. remove the object and its collections from the second level cache

3. remove the object and its collections from the data base

4. None of the above

7. Which statement is correct?

1. Only the Session that you obtained with sf.getCurrentSession() is flushed and closed automatically

2. Only the Session that you obtained with sf.openSession() is flushed and closed automatically

3. Only the Session that you obtained with sf.getNewSession() is flushed and closed automatically

4. None of the above

8. what does hibernate.hbm2ddl.auto create this means?

1. create tables automatically

2. create session object automatically

3. create Sessio Factory object automatically

4. None

9. How bhm.xml file include other hbm.xml files?

1. <mapping resource="activity.hbm.xml"/>

2. <include resource="activity.hbm.xml"/>

3. <add resource="activity.hbm.xml"/>

4. None

10. Is Hibernate Session threadsafe?

1. yes

2. no

3. no relation with thread

4. none

11. Which statement is correct?

1. The CacheMode controls how a particular session interacts with the second-level cache.

2. The CacheMode don't controls session interaction with the second-level cache.

3. both

4. none

12. How can you make a property be read from the database but not modified in anyway?

1. By using the insert="false" and update="false" attributes.

2. By using the isinsert="false" and isupdate="false" attributes.

3. By using the isinsert="no" and isupdate="no" attributes.

4. None

13. What does session.createCriteria().uniqueResult() return?

1. Object

2. String

3. ResultSet

4. HibernateResultSet

14. Which statement is correct?

1. session.contains() method to determine if an instance belongs to the session cache.

2. session.contains() method to determine if an instance belongs to the data base.

3. Both are correct

4. None of the above

15. which 2nd level cache is better in hibernate?

1. EHCache

2. GumoCache

3. DASCache

4. TestCache

16. Which statement is correct about session.load()?

1. load() will throw an unrecoverable exception if there is no matching database row.

2. load() will return null if there is no matching database row.

3. None of the above

17. Which of the following is tag of hibernate.cfg.xml?

1. SQL variant to generate

2. Size of the database

3. All of the above

4. None of the above

18. There are core interfaces are used in just about every Hibernate application. Using these interfaces, you can store and retrieve persistent objects and control transactions. Select the interface that you see

1. Configuration interface

2. User interface

3. All of the above

4. None of the above

19. Which statement is correct?

1. bag has index column

2. bag permits duplicate element values

3. bag does not permits duplicate element values

4. None

20. How can get a session object ?

1. SessionFactory.getSession();

2. SessionFactory.openSession();

3. SessionFactory.get();

4. (session)SessionFactory.getObject();

1. Which of the following are most common configuration methods of Hibernate Configuation

A. Mapping files

B. http.conf

C. XML Configuration hibernate.cfg.xml

D. web.config

2. Which of the following is FALSE about Session in hibernate

A. Session is a light weight non-threadsafe object

B. You can share the session between threads

C. Session represents a single unit-of-work with the database

D. Session is the primary interface for the persistence service

E. A session loads database connections using lazy-loading

3. \_\_\_\_\_\_\_\_\_\_ objects can be passed across layers all the way up to the presentation layer without having to use any DTOs (Data Transfer Objects). You can later re-attach them to another session

4. Which of the following are tags of hibernate.cfg.xml? Select all that apply

A. DTD

B. JDBC connection

C. SQL variant to generate

D. Mapping files

E. Size of the database

5. There are core interfaces are used in just about every Hibernate application. Using these interfaces, you can store and retrieve persistent objects and control transactions. Select all the interfaces that you see

A. Configuration interface

B. Session interface

C. Query and Criteria interfaces

D. User Interface

E. Configuration interface

6. Which of the following is NOT a role of the session interface? Select only ONE

A. Holds a mandatory (first-level) cache of persistent objects, used when navigating the object graph or looking up objects by identifier

B. Created during application initialization

C. Wraps a JDBC connection

D. Act as Factory for Transaction

7. Which of the following is NOT a step in the Hibernate communication with RDBMS? Select ALL than Apply (only one doesnt )

A. Create HQL Query

B. Execute query to get list containing Java objects

C. Create session from configuration object

D. Load the Hibernate configuration file and create configuration object

E. Get one session from the session factory

8. Which of the following is not a Session method? Select ONE

A. Session.save()

B. Session.remove()

C. Session.saveorupdate()

D. Session.persist()

E. Session.load()

9. What is the method name Session.\_\_\_\_() that would re-load an object and all its collections

10. Which of the following is NOT a best practice for defining your Hibernate persistent classes?

A. You must have a default no-argument constructor for your persistent classes and there should be getXXX() (i.e accessor/getter) and setXXX( i.e. mutator/setter) methods for all your persistable instance variables.

B. You should implement the equals() and hashCode() methods based on your business key and it is important not to use the id field in your equals() and hashCode() definition if the id field is a surrogate key (i.e. Hibernate managed identifier). This is because the Hibernate only generates and sets the field when saving the object.

C. It is recommended to implement the Serializable interface. This is potentially useful if you want to migrate around a multi-processor cluster.

D. The persistent class should be final because if it is final then lazy loading can be used by creating proxy objects.

1.What is Hibernate?

Hibernate is a pure Java object-relational mapping (ORM) and persistence framework that allows you to map plain old Java objects to relational database tables using (XML) configuration files. Its purpose is to relieve the developer from a significant amount of relational data persistence-related programming tasks.

2.What is ORM?

ORM stands for object/relational mapping. ORM is the automated persistence of objects in a Java application to the tables in a relational database.

3.What does ORM consists of?

An ORM solution consists of the following four pieces:

1. API for performing basic CRUD operations

2. API to express queries referring to classes

3. Facilities to specify metadata

4. Optimization facilities : dirty checking,lazy associations fetching

4.What are the ORM levels?

The ORM levels are:

1. Pure relational (stored procedure.)

2. Light objects mapping (JDBC)

3. Medium object mapping

4. Full object Mapping (composition,inheritance,polymorphism,persistence by reach ability)

5.Why do you need ORM tools like hibernate?

The main advantage of ORM like hibernate is that it shields developers from messy SQL. Apart from this,ORM provides following benefits: Improved productivity

1. High-level object-oriented API

2. Less Java code to write

3. No SQL to write Improved performance

1. Sophisticated caching

2. Lazy loading

3. Eager loading Improved maintainability

1. A lot less code to write Improved portability

1. ORM framework generates database-specific SQL

6.What are the most common methods of Hibernate configuration?

The most common methods of Hibernate configuration are:

1. Programmatic configuration

2. XML configuration (hibernate.cfg.xml)

7.What are the Core interfaces are of Hibernate framework?

The five core interfaces are used in just about every Hibernate application. Using these interfaces,you can store and retrieve persistent objects and control transactions.

1. Session interface

2. SessionFactory interface

3. Configuration interface

4. Transaction interface

5. and Criteria interfaces

8.What Does Hibernate Simplify?

Hibernate simplifies:

1. Saving and retrieving your domain objects

2. Making database column and table name changes

3. Centralizing pre save and post retrieve logic

4. Complex joins for retrieving related items

5. Schema creation from object model

9.What role does the Session interface play in Hibernate?

The Session interface is the primary interface used by Hibernate applications. It is a single-threaded,short-lived object representing a conversation between the application and the persistent store. It allows you to create query objects to retrieve persistent objects. Session session = sessionFactory.openSession(); Session interface role:

1. Wraps a JDBC connection

2. Factory for Transaction

3. Holds a mandatory (first-level) cache of persistent objects,used when navigating the object graph or looking up objects by identifier

10.What role does the SessionFactory interface play in Hibernate?

The application obtains Session instances from a SessionFactory. There is typically a single SessionFactory for the whole application뾠reated during application initialization. The SessionFactory caches generate SQL statements and other mapping metadata that Hibernate uses at runtime. It also holds cached data that has been read in one unit of work and may be reused in a future unit of work. SessionFactory sessionFactory = configuration.buildSessionFactory();

11.What is the general flow of Hibernate communication with RDBMS?

The general flow of Hibernate communication with RDBMS is :

1. Load the Hibernate configuration file and create configuration object. It will automatically load all hbm mapping files

2. Create session factory from configuration object

3. Get one session from this session factory

4. Create HQL Query

5. Execute query to get list containing Java objects

12.What is Hibernate Query Language (HQL)?

Hibernate offers a query language that embodies a very powerful and flexible mechanism to query,store,update,and retrieve objects from a database. This language,the Hibernate query Language (HQL),is an object-oriented extension to SQL.

13.How do you map Java Objects with Database tables?

1. First we need to write Java domain objects (beans with setter and getter).

2. Write hbm.xml,where we map java class to table and database columns to Java class variables.

14.Define cascade and inverse option in one-many mapping?

cascade - enable operations to cascade to child entities. cascade="all|none|save-update|delete|all-delete-orphan" inverse - mark this collection as the "inverse" end of a bidirectional association. inverse="true|false" Essentially "inverse" indicates which end of a relationship should be ignored,so when persisting a parent who has a collection of children,should you ask the parent for its list of children,or ask the children who the parents are?

15.What is the difference between and merge and update?

Use update() if you are sure that the session does not contain an already persistent instance with the same identifier,and merge() if you want to merge your modifications at any time without consideration of the state of the session.

16.What do you mean by Named � SQL query?

Named SQL queries are defined in the mapping xml document and called wherever required. Example: SELECT emp.EMP\_ID AS {emp.empid},emp.EMP\_ADDRESS AS {emp.address},emp.EMP\_NAME AS {emp.name} FROM Employee EMP WHERE emp.NAME LIKE :name Invoke Named Query : List people = session.getNamedQuery("empdetails") .setString("TomBrady",name) .setMaxResults(50) .list();

17.How do you switch between relational databases without code changes?

Using Hibernate SQL Dialects ,we can switch databases. Hibernate will generate appropriate hql queries based on the dialect defined.

18.If you want to see the Hibernate generated SQL statements on console,what should we do?

In Hibernate configuration file set as follows: true

19.What are derived properties?

The properties that are not mapped to a column,but calculated at runtime by evaluation of an expression are called derived properties. The expression can be defined using the formula attribute of the element.

20.What are the Collection types in Hibernate?

1. Bag

2. Set

3. List

4. Array

5. Map

21.What are the types of inheritance models in Hibernate?

There are three types of inheritance models in Hibernate:

1. Table per class hierarchy

2. Table per subclass

3. Table per concrete class

22.What are the types of Hibernate instance states?

Three types of instance states:

1. Transient -The instance is not associated with any persistence context

2. Persistent -The instance is associated with a persistence context

3. Detached -The instance was associated with a persistence context which has been closed � currently not associated

23.What is transactional write-behind?

Hibernate uses a sophisticated algorithm to determine an efficient ordering that avoids database foreign key constraint violations but is still sufficiently predictable to the user. This feature is called transactional write-behind.

24.What are Callback interfaces?

Callback interfaces allow the application to receive a notification when something interesting happens to an object뾣or example,when an object is loaded,saved,or deleted. Hibernate applications don't need to implement these callbacks,but they're useful for implementing.

25.What is automatic dirty checking?

Automatic dirty checking is a feature that saves us the effort of explicitly asking Hibernate to update the database when we modify the state of an object inside a transaction.

26.What do you mean by fetching strategy?

A fetching strategy is the strategy Hibernate will use for retrieving associated objects if the application needs to navigate the association. Fetch strategies may be declared in the O/R mapping metadata,or over-ridden by a particular HQL or Criteria query.

27.What is Hibernate proxy?

The proxy attribute enables lazy initialization of persistent instances of the class. Hibernate will initially return CGLIB proxies which implement the named interface. The actual persistent object will be loaded when a method of the proxy is invoked.

28.How can Hibernate be configured to access an instance variable directly and not through a setter method?

By mapping the property with access="field" in Hibernate metadata. This forces hibernate to bypass the setter method and access the instance variable directly while initializing a newly loaded object.

29.What are the ways to express joins in HQL?

HQL provides four ways of expressing (inner and outer) joins:-

1. An implicit association join

2. An ordinary join in the FROM clause

3. A fetch join in the FROM clause.

4. A theta-style join in the WHERE clause.

30.How can a whole class be mapped as immutable?

Mark the class as mutable="false" (Default is true),. This specifies that instances of the class are (not) mutable. Immutable classes,may not be updated or deleted by the application.

(1) Under normal circumstances, the relational data model and object model which match (multiple choice)

A) table corresponds to class B) corresponding to the record object C) correspond to the fields of the table class attribute D) corresponding to the reference relationships between tables class dependencies between

(2) the following SessionFactory, which is correct? (Multiple choice)

A) For each database transaction should create a SessionFactory object B) a SessionFactory object corresponds to a database to store source. C) SessionFactory is a heavyweight object, should not be free to create. If there is only one database storage source, you only need to create one. D) the SessionFactory The load () method is used to load persistent objects

(3) the Customer class is a Set attribute types of orders, used to store the the Order order object, in the Customer.hbm.xml file, which element mapping orders attributes?

A) B) C) D) <: property>

(4) Element has a cascade attribute, if you want to Hibernate cascade save a collection of objects, Casecade property should take what value? (Radio)

A) noneB) saveC) deleteD) save-update

(5) Which of the following Session?

Load () A) B) save ()) delete () D) update () E) open ()) close ()

(6) What is the result of the following program print? (Radio)

1. the Tx = session.beginTransaction ();

2. Customer c1 = (Customer) session.load (Customer.class, new Long (1));

3. Customer c2 = (Customer) session.load (Customer.class, new Long (1));

4. System.out.println (c1 == c2);

5. tx.commit ();

6. Session.close ();

A) running error thrown exception B) Print falseC,) Print true

(7) the following code to modify the name attribute of Customer twice:

1. the Tx = session.beginTransaction ();

2. Customer customer = (Customer) session.load (Customer.class,

3. new Long (1));

4. customer.setName (\ "Jack \");

5. customer.setName (\ "Mike \");

6. tx.commit ();

Implementation of the above program, Hibernate needs to be submitted to the database a few UPDATE statement? (Radio)

A) 0 B) 1 C) 2 D) 3

(8) in the persistence layer, the subjects were divided into what state? (Multiple choice)

A) independent state of temporary state B) C) free state D) persistent state

(9) For the following procedure, the Customer object in the first few lines into a persistent state? (Radio)

1. Customer customer = new Customer (); / / line1

2. customer.setName (\ "Tom \"); / / line2

3. Session session1 = sessionFactory.openSession (); / / line3

4. Transaction tx1 = session1.beginTransaction (); / / line4

5. session1.save (customer); / / line4

6. tx1.commit (); / / line5

7. session1.close (); / / line6

A) line1 B) line2 C) line3 D) line4 E) line5 F) line6

(10) For the following procedure, the Customer object in the first few lines into a free state? (Radio)

1. Customer customer = new Customer (); / / line1

2. customer.setName (\ "Tom \"); / / line2

3. Session session1 = sessionFactory.openSession (); / / line3

4. Transaction tx1 = session1.beginTransaction (); / / line4

5. session1.save (customer); / / line4

6. tx1.commit (); / / line5

7. session1.close (); / / line6

A) line1 B) line2 C) line3 D) line4 E) line5 F) line6

(11) Which of the following search strategy using the outer link query? (Radio)

The delayed retrieval A) immediately retrieve B) C) pressing left outside link search

(12) assuming that the orders of the Customer class collection the delayed search strategy, compile or run the following program, what would happen (radio)

1. Session the session = sessionFactory.openSession ();

2. the Tx = session.beginTransaction ();

3. Customer customer = (Customer) session.get (Customer.class, new Long (1));

4. tx.commit ();

5. Session.close ();

6. Iterator orderIterator = customer.getOrders (). Iterator ();

A) compile error B) compiler, and running C) compiled by, but the run-time exception is thrown

(13) HQL and SQL, which of the following statements is correct? (Multiple choice)

A) HQL and SQL no difference B) HQL object-oriented and SQL to manipulate relational database C) in HQL with SQL, contains select, insert, update, delete statement D) HQL only be used to query data, does not support the insert, update and delete statements

(14) The transaction isolation level who? (Radio)

A) Java application B) Hibernate C) database system D) JDBC driver

(15) pessimistic locking and optimistic locking, which has good concurrent performance? (Radio)

A) pessimistic locking B) optimistic locking

Answer:

(1) A, B, C (2) B, C (3) A (4) D (5) A, B, C, D, F (6) C (7) B (8) A, C, D (9) D (10) F (11) C (12) C (13), D (14) C (15)

1. What does CacheMode do?

a. controls how a particular SessionFactory interacts with the Data Base.

b. controls how a particular SessionFactory interacts with the second-level cache.

c. controls how a particular session interacts with the second-level cache.

d. None

2. What does session.createCriteria().uniqueResult() return?

a. Object

b. String

c. ResultSet

d. HibernateResultSet

3. Load child object automatically when parent object is loaded?

a. lazy=yes

b. lazy=fasle

c. lazy=true

d. lazy=no

4. What does session.evict() method do?

a. remove the object and its collections from the first level cache

b. remove the object and its collections from the second level cache

c. remove the object and its collections from the data base

d. None of the above

5. How can get a session object ?

a. SessionFactory.getSession();

b. SessionFactory.openSession();

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6. what does addScalar() method does in the below code ?

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.addScalar("maxWeight", Hibernate.DOUBLE);

.uniqueResult();

a. confirm that maxWeight always be double

b. maxWeight should be double other wise Exception

c. maxWeight may be double or not.

d. None

7. what is the value of yyy in the below configuration?

<property name="current\_session\_context\_class">yyy</property>

a. OSCache

b. thread

c. EHCache

d. Non of these

8. Which of the following is tag of hibernate.cfg.xml?

a. SQL variant to generate

b. Size of the database

c. All of the above

d. None of the above

9. How to enable query cache in hibernate?

a. hibernate.cache.query\_cache true

b. hibernate.cache.use\_query\_cache true

c. hibernate.cache.query\_cache yes

d. none

10. How bhm.xml file include other hbm.xml files?

a. <mapping resource="activity.hbm.xml"/>

b. <include resource="activity.hbm.xml"/>

c. <add resource="activity.hbm.xml"/>

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11. Which of the following is FALSE about Session in hibernate?

a. Session is a light weight non-threadsafe object

b. You can share the session between threads

c. Session represents a single unit-of-work with the database

d. Session is the primary interface for the persistence service

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b. Only the Session that you obtained with sf.openSession() is flushed and closed automatically

c. Only the Session that you obtained with sf.getNewSession() is flushed and closed automatically

d. None of the above

14. Is this configuration correct in hibernate?

<property name="askby" column="askby" type="string" length="200"/>

<property name="askby" column="brief" type="string" length="500"/>

a. Yes

b. No

c. Both 1 and 2

d. None

15. Which Cache Strategy particularly useful in cases where underlying data may have been updated via a separate process (i.e., not modified through Hibernate)?

a. Query.setCacheMode(CacheMode.READ).

b. Query.setCacheMode(CacheMode.REFRESH).

c. Query.setCacheMode(CacheMode.NONE).

d. Query.setCacheMode(CacheMode.REFRESHDATABASE).

16. Employee emp = session.load(Employee .class);

session.close();

Is Employee object available to access ?

a. Yes

b. No

c. None

17. Is Hibernate Session threadsafe?

a. yes

b. no

c. no relation with thread

d. none

18. which 2nd level cache is better in hibernate?

a. EHCache

b. GumoCache

c. DASCache

d. TestCache

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b. remove the dirty data from data base.

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24. It is possible to declare mappings for multiple classes in one mapping file?

a. true

b. false

c. can't say

d. none of the above

25. Which statement is correct?

a. session.contains() method to determine if an instance belongs to the session cache.

b. session.contains() method to determine if an instance belongs to the data base.

c. Both are correct

d. None of the above

26. What does sess.delete() do?

a. remove data from in momery.

b. remove from database.

c. remove from sessionFactory.

d. None of the above.

27. Does hibernate allow mixing table-per-class hierarchy and table-per-subclass strategies?

a. Yes

b. No

c. Can't say

d. None of the above

28. Which statement is correct about session.load()?

a. load() will throw an unrecoverable exception if there is no matching database row.

b. load() will return null if there is no matching database row.

c. None of the above

29. Which statement is correct?

a. Specifying join as the fetch strategy in the mapping document does affect HQL queries.

b. Specifying join as the fetch strategy in the mapping document does not affect c. c. HQL queries.

d. None

30. How can you make a property be read from the database but not modified in anyway?

a. By using the insert="false" and update="false" attributes.

b. By using the isinsert="false" and isupdate="false" attributes.

c. By using the isinsert="no" and isupdate="no" attributes.

d. None

31. What is the root level element in a hibernate mapping file?

a. <hibernate-mapping>

b. <session-mapping>

c. <sessionfactory-mapping>

d. none of the above

32. What happens when both hibernate.properties and hibernate.cfg.xml are in the classpath?

a. The settings of the properties file will override the settings used in the XML configuration

b. The settings of the XML configuration file will override the settings used in the properties

c. DuplicateConfigurationException

d. None

33. Which of the following are most common configuration methods of Hibernate Configuation?

a. http.conf

b. XML Configuration hibernate.cfg.xml

c. web.config

d. persistence.xml