



Date _____

Score _____

1. Describe the process of securing sensitive data in a database table using hashing and the benefits it provides in terms of data protection.
2. The DAO pattern in Java helps in decoupling the business logic from the data access logic. True or False?
☐ T True
☐ F False
3. What is the primary advantage of using left joins in SQL?
☐ A Enforces data integrity
☐ B Speeds up query execution
☐ C Retrieves all records from the left table and matching records from the right table
☐ D Retrieves only unmatched records
4. Inner joins return all records when there is a match in both tables being joined. True or False?
☐ T True
☐ F False
5. What is the main purpose of using JdbcTemplate in Java?
☐ A Simplify database operations
☐ B Optimize network communication
☐ C Automate unit testing
☐ D Handle user authentication

- 6.** Discuss the importance of securing sensitive data in a database table and the methods that can be used to achieve this.
- 7.** Hashing is a secure way to store sensitive data in a database table. True or False?
- ☐ T True
- ☐ F False
- 8.** What is the purpose of a foreign key constraint in a database?
- ☐ A Ensure uniqueness of values
- ☐ B Enforce referential integrity
- ☐ C Speed up data retrieval
- ☐ D Define default values
- 9.** SQL injection attacks can be prevented by using parameterized queries. True or False?
- ☐ T True
- ☐ F False
- 10.** What is the purpose of a primary key in a database table?
- ☐ A Ensure data integrity
- ☐ B Allow for efficient data retrieval
- ☐ C Enforce entity relationships
- ☐ D Uniquely identify each record

11. Based on the attached image:
What is the name of the DAO interface?

- ☐ A HotelDao
- ☐ B MemoryHotelDao
- ☐ C List<Hotel>
- ☐ D hotels

```
public class MemoryHotelDao implements HotelDao {  
    public static List<Hotel> hotels = new ArrayList<>();  
  
    public MemoryHotelDao() {  
        if (hotels.size() == 0) {  
            setHotels();  
        }  
    }  
  
    @Override  
    public Hotel get(int id) {  
        for (Hotel hotel : hotels) {  
            if (hotel.getId() == id) {  
                return hotel;  
            }  
        }  
        return null;  
    }  
  
    @Override  
    public List<Hotel> list() {  
        return hotels;  
    }  
  
    @Override  
    public void create(Hotel hotel) {  
        hotels.add(hotel);  
    }  
  
    private void setHotels() {  
        hotels.add(new Hotel(001,  
            "Hilton Cleveland",  
            new Address("111 W 10th St", "Cleveland", OH "Ohio", zip "44113"),  
            4,  
            "www.hilton.com", 2700));  
    }  
}
```

12. What are the two main ways in which we learned how to implement run-time polymorphism in Java?

13. How is compile time polymorphism achieved in Java?

14. What does the term POJO mean?