Name : N D A Pinsara

ID : 28532

LAB 01

1. // Item class
   public class Item {
       protected int location;
       protected String description;

       // Constructor
       public Item(int location, String description) {
           this.location = location;
           this.description = description;
       }

       // Getter for location
       public int getLocation() {
           return location;
       }

       // Setter for location
       public void setLocation(int location) {
           this.location = location;
       }

       // Getter for description
       public String getDescription() {
           return description;
       }

       // Setter for description
       public void setDescription(String description) {

```java
        this.description = description;
    }
}

// Monster class (subclass of Item)
public class Monster extends Item {
    // Constructor
    public Monster(int location, String description) {
        super(location, description);
    }
}
```

2. 1.B
    3.B
    4.B
    5.C
    6.C
    7.D

3.

1. Real-world objects contain **state** and **behavior**.

2. A software object's state is stored in **instance variables**.

3. A software object's behavior is exposed through **methods**.

4. Hiding internal data from the outside world, and accessing it only through publicly exposed methods is known as data **encapsulation**.

5. A blueprint for a software object is called a **class**.

6. Common behavior can be defined in a **superclass** and inherited into a **subclass using the extends** keyword.

7. A collection of methods with no implementation is called an **interface**.

8. A namespace that organizes classes and interfaces by functionality is called a **package**.

9. The term API stands for **Application Programming Interface**.