Practical 2

Part 1

1)

```
public class Item {
    private int location;
    private String description;

    public Item(int location, String description) {
        this.location = location;
        this.description = description;
    }
    // Getter and Setter methods for location and description
    public int getLocation() {
        return location;
    }
    public void setLocation(int location) {
        this.location = location;
    }
    public String getDescription() {
        return description;
    }
    public void setDescription(String description) {
        this.description = description;
    }
}
public class Monster extends Item {
    // Constructor for the Monster class
    public Monster(int location, String description) {
        super(location, description);
    }
}
```

Part 2

i) Super
ii) Private
iii) Package
iv) import pkg.*
v) charAt()
vi) length()

Part 3

1. Real-world objects contain attributes and behavior.
2. A software object's state is stored in an instance variable.
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 parent class and inherited into a child class 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.