

Lab sheet 1

Part 1

Item class

```
package com.mycompany.class1;

public class item
{
    protected int location;
    protected String description;

    public item(int location, String description)
    {
        this.location = location;
        this.description = description;
    }

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

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

    // Getter and Setter methods for description
```

```
public String getDescription()
{
    return description;
}

public void setDescription(String description)
{
    this.description = description;
}
}
```

Monster class

```
package com.mycompany.class1;

public class monster extends item
{
    public monster(int location, String description)
    {
        super(location, description);
    }
}
```

Part 2

1. b) super
2. b) private
3. b) Packages
4. c) import pkg.*
5. c) charAt()
6. d) length()

Part 3

Fill in the blanks using appropriate term.

1. Real-world objects contain **attributes** 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 **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**.