

## PART 01:

1. **Create a new class called 'Item' with two protected instance variables (private variables), an integer variable called 'location', and a String variable called 'description'.**

```
package com.mycompany.practicle02;
public class Item
{
    private int location;
    private String description;
}
```

2. **Add a constructor method for the Item class that takes an integer and a String as arguments (in that order).**

```
package com.mycompany.practicle02;
public class Item
{
    private int location;
    private String description;

    public Item(int l, String d)
    {
        location=l;
        description=d;
    }
}
```

3. **The constructor should assign the value of these parameters to the corresponding instance variables.**

```
Public static void main(String[] args)
{
    Item i1=new Item(123, "packed");
    i1.displayDetails();
}
```

4. **Add getter and setter methods for the location and description variables.**

```
Public void setLocation(int location)
{
    this.location=location;
}
Public int getLocation()
{
    Return location;
}
```

```

}
Public void setDescription(String description)
{
    This.description=description;
}
Public String getDescription()
{
    Return description;
}

```

5. **Add another class called Monster and make the Monster class a sub-class of the Item class.**

```
Public class Monster extends Item
```

6. **Add a constructor method to the Monster class that takes an integer and a String argument just like the Item class constructor.**

```

Public class Monster extends Item
{
    private int a;
    private String b;
    public Monster( int a,String b)
    {
        this.a=a;
        this.b=b;
    }
}

```

7. **Use these arguments to call the Item super class constructor from within the Monster class constructor so that the instance variables in the superclass are instantiated correctly.**

```

Public class Monster extends Item
{
    private int a;
    private String b;
    public Monster(int location,String description,int a,int b)
    {
        super(location,description)
        this.a=a;
        this.b=b;
    }
}

```

## PART 02

1. Which of these keywords is used to refer to member of base class from a sub class?  
a) upper      [b\) super](#)      c) this      d) None of the mentioned
3. The modifier which specifies that the member can only be accessed in its own class is  
a) public      [b\) private](#)      c) protected      d) none
4. Which of these is a mechanism for naming and visibility control of a class and its content?  
a) Object      [b\) Packages](#)  
c) Interfaces      d) None of the Mentioned.
5. Which of the following is correct way of importing an entire package 'pkg'?  
a) import pkg.      b) Import pkg.  
[c\) import pkg.\\*](#)      d) Import pkg.\*
6. Which of these method of class String is used to extract a single character from a String object?  
a) CHARAT()      b) charat()  
[c\) charAt\(\)](#)      d) CharAt()
7. Which of these method of class String is used to obtain length of String object?  
a) get()      b) Sizeof()  
c) lengthof()      [d\) length\(\)](#)

## PART 03: Fill in the blanks using appropriate term.

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 or functions](#).
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 [super class](#) and inherited into a [sub 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](#).