Chapter 9 - Access Modifiers & Constructors

Access Modifiers

Specifiers where a property/method is accessible. There are four types of access modifiers in Java:
1. Private
2. Default
3. Protected
4. Public

Getters and Setters

Getter → Returns the Value [accessors]
Setter → Sets/Updates the Value [mutators]

Example:

```java
public class Employee {
    private int id;
    private String name;

    public String getName() {
        return name;
    }

    public void setName() {
        this.name = "Your name";
    }

    public void setName(String n) {
        this.name = n;
    }
}
```
Quick Quiz: Use these getters and setters from the main method.

Constructors in Java
A member function used to initialize an object while creating it.

```
Employee harry = new Employee();
harry.setName("Harry Bhai");
```

In order to write our own constructor, we define a method with name same as class name.

```
public Employee ()
{
    name = "Your Name";
}
```

Constructor Overloading in Java
Constructors can be overloaded just like other methods in Java. We can overload the Employee constructor like below:

```
public Employee (String n)
{
    name = n;
}
```

Note: (1) Constructors can take parameters without being overloaded.

(2) There can be more than two overloaded constructors.
Quick Quiz: Overload the Employee constructor to initialize the Salary to Rs 10,000