

## Chapter 9 - Access Modifiers & Constructors

### Access Modifiers

Specifies 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 :

```
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.