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| Java Annotations | Java Annotation is a tag that represents the metadata i.e. attached with class, interface, methods or fields to indicate some additional information which can be used by java compiler and JVM.  Annotations in Java are used to provide additional information, so it is an alternative option for XML and Java marker interfaces. |
| Built-In Java Annotations used in Java code | @Override  @SuppressWarnings  @Deprecated |
| How annotation works | @Override  @Override annotation assures that the subclass method is overriding the parent class method. If it is not so, compile time error occurs. |
| Points to remember for java custom annotation signature | 1. Method should not have any throws clauses 2. Method should return one of the following: primitive data types, String, Class, enum or array of these data types. 3. Method should not have any parameter. 4. We should attach @ just before interface keyword to define annotation. 5. It may assign a default value to the method. |
| Types of Annotation | 1. Marker Annotation 2. Single-Value Annotation 3. Multi-Value Annotation |
| 1) Marker Annotation | An annotation that has no method, is called marker annotation. For example:  The @Override and @Deprecated are marker annotations.  **C**ustom Annotation: **@interface** MyAnnotation{} |
| 2) Single-Value Annotation | An annotation that has one method, is called single-value annotation   1. **@interface** MyAnnotation{ 2. **int** value(); 3. }   We can provide the default value also. For example:   1. **@interface** MyAnnotation{ 2. **int** value() **default** 0; 3. }   @MyAnnotation(value=10) |
| 3) Multi-Value Annotation | An annotation that has more than one method, is called Multi-Value annotation. For example:   1. **@interface** MyAnnotation{ 2. **int** value1() **default** 1; 3. String value2() **default** ""; 4. String value3() **default** "xyz"; 5. }   @MyAnnotation(value1=10,value2="Arun Kumar",value3="Ghaziabad") |
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