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Spring Boot 9AM
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Project Lombok API-II

@NoArgsConstructor : It always generates default constrcutor.

@RequiredArgsConstructor:
  If there are no variales annotated with @NonNull then
  it will generate default constrcutor.

----Examples---

#1.

```
@RequiredArgsConstructor
public class Employee {
        private Integer eid;
        private String ename;
}
```

Generated code:-

```
public class Employee {
        private Integer eid;
        private String ename;
        public Employee() {
            super();
        }
}
```

#2.***

```
@NoArgsConstructor
@RequiredArgsConstructor
public class Employee {
        private Integer eid;
        private String ename;
}
```

Generated Code by Lombok:

```
//compile time error (duplicate method Employee() )
public class Employee {
        private Integer eid;
        private String ename;
        public Employee() { ___ }
        public Employee() { ___ }
}
```

** @AllArgsConstructor : It will generate default constrcutor
           if class has zero variables (no variables).

-----Example----------

#3.

```
@AllArgsConstructor
public class Employee {

}
```

Generated code:

```
public class Employee {
   public Employee() {
      super();
   }
}
```

#4.

```
@NoArgsConstructor
@AllArgsConstructor
public class Employee {

}
```

Generated code:

```
//compile time error (duplicate method Employee() )
public class Employee {
   public Employee() { __ }
   public Employee() { __ }
}
```

#5. ***??

```
@NoArgsConstructor
@RequiredArgsConstructor
@AllArgsConstructor
public class Employee {

}
```

Generated code:

```
//compile time error (duplicate method Employee() )
public class Employee {
   public Employee() { __ }
   public Employee() { __ }
   public Employee() { __ }
}
```


Lombok : @Data

Here , @Data reduces multiple annotations coding.

@Data is a combination of
 @Setter + @Getter + @ToString + @EqualsAndHashCode +
@RequiredArgsConstructor

---Examples---

#1

```
@Data
public class Employee {
  private Integer eid;
}
```

Generated code:

```
public class Employee {
  private Integer eid;

  public Employee() { ___ } //default const.

  // setEid, getEid
  // equals() hashCode()
  // toString()
}
#2.
@Data
public class Employee {
  @NonNull
  private Integer eid;

  //one param const.
  public Employee(Integer eid) { this.eid=eid; }

  // setEid, getEid
  // equals() hashCode()
  // toString()
}

***************
*** NOTE  *****
***************
@Data provides internally @RequiredArgsConstructor,
if programmer did not write any Constructor annotation
(@___ArgsConstructor).

--Ex-------
#1.
@Data                // it wont provide @RequiredArgsConstructor now.
@NoArgsConstructor   //default constrcutor
public class Employee {
  @NonNull
  private Integer eid;
}
Generated code: //only one constrcutor
public class Employee {
  private Integer eid;

  public Employee() { ___ }
}

#2.
@Data
@AllArgsConstructor
public class Employee {
        @NonNull
        private Integer eid;
        private String ename;
        private Double esal;

}
Generated code:
public class Employee {
        private Integer eid;
        private String ename;
        private Double esal;
     public Employee(eid,ename,esal) { ___ } //3 params
}
```

*)Note:-
 Lombok supports only 3 constructors (1 default, 2 param).
 If we need any other constrcutors then we must add manually.

--Ex--

```
package in.nareshit.raghu;

import lombok.AllArgsConstructor;
import lombok.Data;
import lombok.NoArgsConstructor;
import lombok.NonNull;
import lombok.RequiredArgsConstructor;

@Data
@NoArgsConstructor //def
@RequiredArgsConstructor //1 param
@AllArgsConstructor //3 param
public class Employee {
        @NonNull
        private Integer eid;
        private String ename;
        private Double esal;

        // i want add one more const?? -- add manually
        public Employee(String ename) {
                this.ename=ename;
        }
}
```
