أكاديمية طويق
Tuwaiq Academy

Exercise (Spring Container)

Q1

```
1 usage
@SpringBootApplication
public class SpringPollApplication {

    public static void main(String[] args) { SpringApplication.run(SpringPollApplication.class, args); }


    @Bean
    public String getMessage1(){
        System.out.println("hey from message1");
        return "1";
    }
}
```

the method getMassage1 will print

Output:

hey from message1

The message will be printed directly.

Q2

```
1 usage
@SpringBootApplication
public class SpringPollApplication {

    public static void main(String[] args) { SpringApplication.run(SpringPollApplication.class, args); }


    @Bean
    @Qualifier("1")
    public String getMessage1(){
        System.out.println("hey from message1");
        return "1";
    }
    @Bean
    public String getMessage2(@Qualifier("1") String data ){
        System.out.println("hey from message2");
        return data ;
    }
```

2 methods, one that has a string, and the other one takes a string

The methods have a qualifier tag with string “1”

Output:

hey from message1

Store the value”1” in the string data

hey from message2

The method will take the value stored in the container that have the same qualifier as the parameter and store it in the data variable then print the “hey from message 2”

Q3

```java
@Bean
@Qualifier("1")
public String getMessage1(){
    System.out.println("hey from message1");
    return "1";
}

@Bean
@Qualifier("2")
public String getMessage2(@Qualifier("3") String data ){
    System.out.println("hey from message2");
    return data;
}

@Bean
@Qualifier("3")
public String getMessage3(){
    System.out.println("hey from message3");
    return "3" ;
}
```

3 methods, two methods that have an integer, and the other one takes a string

First output:

hey from message1

hey from message3

Store the value”3” in the string data

hey from message2

First, the methods with no parameters will be printed, getMessage1 then getMessage3, then the method getMessage2

Will take the value stored in the container and match the qualifier, then store it in the data variable, then print “hey from message2”

Second output:

hey from message3

hey from message1

Store the value”3” in the string data

hey from message2

First, the methods with no parameters will be printed getMessage3 then getMessage1 , then the method getMessage2

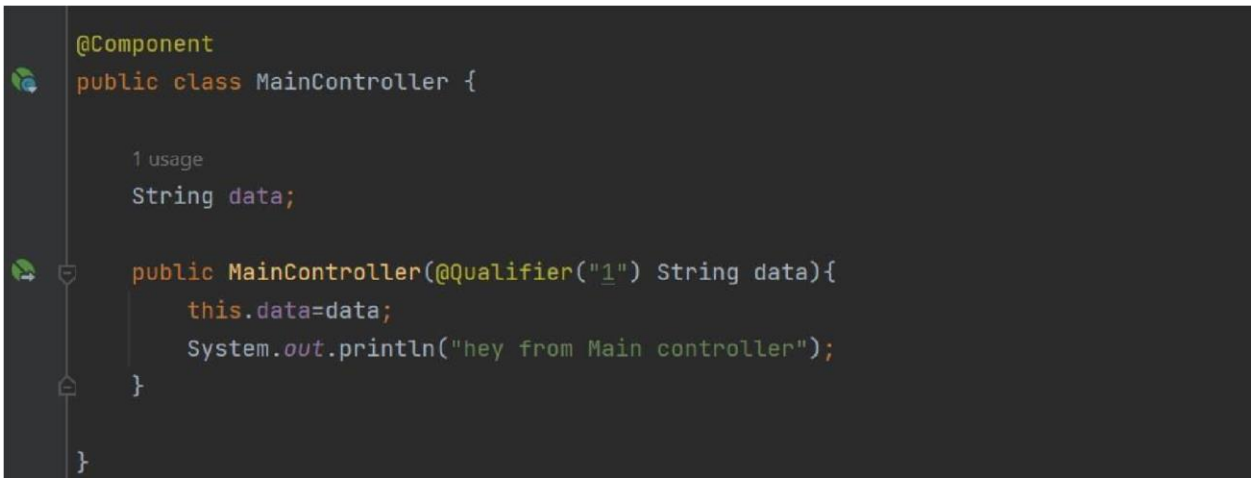
Will take the value stored in the container and match the qualifier, then store it in the data variable, then print “hey from message2”

Q4

```java
@Bean
@Qualifier("1")
public String getMessage1(){
    System.out.println("hey from message1");
    return "1";
}

@Bean
@Qualifier("2")
public String getMessage2(@Qualifier("3") String data ){
    System.out.println("hey from message2");
    return data;
}

@Bean
@Qualifier("3")
public String getMessage3(){
    System.out.println("hey from message3");
    return "3" ;
}
```



```java
@Component
public class MainController {

    1 usage
    String data;

    public MainController(@Qualifier("1") String data){
        this.data=data;
        System.out.println("hey from Main controller");
    }

}
```

Store the value of “1” in the String data in class MiniController

The first output:

hey from message1

hey from message3

Hey from main controller

hey from message2

Store the value”3” in the string data

First, the methods with no parameters will be printed getMessage1 then getMessage3 , then the method minicontroller will take the value in getMessage1 that matches the its qualifier and store it in the value data then print “Hey from main controller”

After that the method getMessage2 will receive the value of getMessage3 store it in the variable data and print “hey from message2”

The Second output:

hey from message3

hey from message1

hey from message2

Store the value”3” in the string data

Hey from main controller

First, the methods with no parameters will be printed getMessage3 then getMessage1 , then the methods getMessage2 will receive the value of getMessage3 store it in the variable data and print “hey from message2”

After that the method minicontroller will take the value in getMessage1 that matches the its qualifier and store it in the value data then print “Hey from main controller”

The Third output:

hey from message1

Hey from main controller

hey from message3

Store the value”3” in the string data

First, the methods getMessage1 will be printed , then the methods the methods minicontroller will take the value in getMessage1 that matches the its qualifier and store it in the value data then print “Hey from main controller”

After that the method getMessage3 will be printed finally the method getMessage2 will receive the value of getMessage3 store it in the variable data and print “hey from message2”.

Q5

```java
    @Bean
    @Qualifier("1")
    public String getMessage1(MainController mainController){
        System.out.println("hey from message1");
        return "1";
    }

    @Bean
    @Qualifier("2")
    public String getMessage2(@Qualifier("3") String data ){
        System.out.println("hey from message2");
        return data;
    }

    @Bean
    @Qualifier("3")
    public String getMessage3(){
        System.out.println("hey from message3");
        return "3" ;
    }
```

```java
import org.springframework.beans.factory.annotation.Qualifier;
import org.springframework.stereotype.Component;

1 usage
@Component
public class MainController {

    1 usage
    String data;

    public MainController(@Qualifier("2") String data){
        this.data=data;
        System.out.println("hey from Main controller");
    }

}
```

Store the value of “3” in the String data in class MiniController

The first output:

hey from message1

hey from message3

hey from message2

Store the value”3” in the string data

hey from main controller

First, the methods with no parameters will be printed getMessage1 then getMessage3, then then that the methods getMessage2 will receive the value of getMessage3 store it in the variable data and print “hey from message2”

After that the method minicontroller will take the value in getMessage2 that matches its qualifier and store it in the value data then print “Hey from main controller”

The Second output:

hey from message3

hey from message1

hey from message2

Store the value”3” in the string data

hey from main controller

First, the methods with no parameters will be printed getMessage3, then getMessage1, then that the methods getMessage2 will receive the value of getMessage3 store it in the variable data, and print “hey from message2”

After that, the method minicontroller will take the value in getMessage2 that matches its qualifier and store it in the value data, then print “Hey from main controller”