

# W1D4: Quiz

## *CS544 Enterprise Architecture*

What is the output of the following application?  
(The package for all these files is edu.mum.cs544)

```
@Configuration
→ @ComponentScan("edu.mum.cs544")
public class Config {
    @Bean
    public String text() {
        return "Hello";
    }
}
```

```
public class App {
    public static void main(String[] args) {
        [ConfigurableApplicationContext context = new
        AnnotationConfigApplicationContext(Config.class);
        System.out.println("Testing Spring Startup");
        → MyClass mc = context.getBean("myClass", MyClass.class);
        mc.sayHello();
        context.close();
    }
}
```

```
@Component
public abstract class MySuper {
    private String text;
    [public MySuper() {
        System.out.println("MySuper Constructor");
    }
    @Value("Thing")
    → public void setText(String text) {
        System.out.println("Setting text to: " + text);
        this.text = text;
    }
    public String getText() { return text; }
}
```

Name: \_\_\_\_\_ StudentID: \_\_\_\_\_

```
@Component
public class MyClass extends MySuper {
    @Autowired @Value("Hello")
    public MyClass(String text) { super();
        → setText(text);
        System.out.println("MyClass Constructor");
    }
    public void sayHello() {
        System.out.println("This is a " + getText());
    }
}
```

Spring

```
@Component
@Aspect
public class TraceAspect {
    @Value("Test")
    private String text;

    public TraceAspect() {
        System.out.println("TraceAspect Constructor - text: " + text);
    }
    @PostConstruct
    public void start() {
        System.out.println("TraceAspect start method - text: " + text);
    }
    @Before("execution(* edu.mum.cs544.*.*(..))")
    public void beforeTrace(JoinPoint jp) {
        System.out.println("Before: " + jp.getSignature().getName());
    }
}
```

Output:

→

```
MySuper Constructor
Setting text to Hello
MyClass Constructor
Setting text to Thing
TraceAspect Constructor test: null
TraceAspect start method text: Test
Testing Spring Startup
This is a Thing < Before say Hello
```