



CS544 EA  
Spring

AOP: Sequence

# Sequence

- Say you add 2 before advices on one method
  - Which runs first?
- The **order of execution** is based on the order that Spring finds the advice methods
  - First the order in which Aspect classes are found
    - Order of <bean> tags in xml
    - Alphabetic Order in which component scan finds them
  - Then order of advice methods in class

```
<aop:aspectj-autoproxy/>
<bean id="accountService" class="accountpackage.AccountService"/>
<bean id="traceAdvice1" class="aopadvice.TraceAdvice1"/>
<bean id="traceAdvice2" class="aopadvice.TraceAdvice2"/>
```

@Aspect

public class TraceAdvice1 {

1 @Before("execution(\* accountpackage.AccountService.addAccount(..))")

public void tracemethodA(JoinPoint joinpoint) {  
 System.out.println("TraceAdvice1:tracemethodA");  
}

2 @Before("execution(\* accountpackage.AccountService.addAccount(..))")

public void tracemethodB(JoinPoint joinpoint) {  
 System.out.println("TraceAdvice1:tracemethodB");  
}  
}

@Aspect

public class TraceAdvice2 {

3 @Before("execution(\* accountpackage.AccountService.addAccount(..))")

public void tracemethodA(JoinPoint joinpoint) {  
 System.out.println("TraceAdvice2:tracemethodA");  
}

4 @Before("execution(\* accountpackage.AccountService.addAccount(..))")

public void tracemethodB(JoinPoint joinpoint) {  
 System.out.println("TraceAdvice2:tracemethodB");  
}  
}

```
<aop:aspectj-autoproxy/>
<bean id="accountService" class="accountpackage.AccountService"/>
<bean id="traceAdvice2" class="aopadvice.TraceAdvice2"/>
<bean id="traceAdvice1" class="aopadvice.TraceAdvice1"/>
```

Switching order of  
<bean> tags

@Aspect

public class TraceAdvice1 {

@Before("execution(\* accountpackage.AccountService.addAccount(..))")

3

public void tracemethodA(JoinPoint joinpoint) {  
 System.out.println("TraceAdvice1:tracemethodA");  
}

@Before("execution(\* accountpackage.AccountService.addAccount(..))")

4

public void tracemethodB(JoinPoint joinpoint) {  
 System.out.println("TraceAdvice1:tracemethodB");  
}  
}

@Aspect

public class TraceAdvice2 {

@Before("execution(\* accountpackage.AccountService.addAccount(..))")

1

public void tracemethodA(JoinPoint joinpoint) {  
 System.out.println("TraceAdvice2:tracemethodA");  
}

@Before("execution(\* accountpackage.AccountService.addAccount(..))")

2

public void tracemethodB(JoinPoint joinpoint) {  
 System.out.println("TraceAdvice2:tracemethodB");  
}  
}