

Sharing Aspect With AspectJ

```
import practice.AOP.LoggingAspect.dynamicProxy.CalculatorInterface;
public aspect SharingAspect {
    pointcut methodExecution(): execution(* CalculatorInterface.*(..));
    after() returning(int result): methodExecution() {
        if(result > 10) {
            System.out.println("Sharing result: " + result);
        }
    }
}
```

With DynamicProxy

```
import java.lang.reflect.Method;
public class SharingAspect {
    static final int sharingPoint = 10;

    public static Object invoke(Object target, Method method, Object[] args) throws
    Throwable {
        Object result = method.invoke(target, args);
        if(result instanceof Integer && (Integer) result > sharingPoint)
            System.out.println("Sharing result: " + result);
        return result;
    }
}

import java.lang.reflect.InvocationHandler;
import java.lang.reflect.Method;
public class InvocationHandlerExample implements InvocationHandler {
    final Object target;
    public InvocationHandlerExample(Object target) {
        this.target = target;
    }
    @Override
    public Object invoke(Object proxy, Method method, Object[] args) throws Throwable {
        return SharingAspect.invoke(target, method, args);
    }
}

import java.lang.reflect.Proxy;
import practice.AOP.LoggingAspect.Calculator;
import practice.AOP.LoggingAspect.dynamicProxy.CalculatorInterface;
public class SharingAspectProxy {
    public static void main(String[] args) {
        new SharingAspectProxy().go();
    }
    void go() {
        Calculator calculator = new Calculator();
        CalculatorInterface proxy = (CalculatorInterface) Proxy.newProxyInstance(
            CalculatorInterface.class.getClassLoader(),
            new Class[]{CalculatorInterface.class},
            new InvocationHandlerExample(calculator)
        );
        proxy.add(6, 7);
        proxy.subtract(5, 2);
    }
}
```