

Dynamic Proxy

```
public interface DinamicProxyInterface {
    void sayHello();
}

public class DinamicProxyConcreteClass implements DinamicProxyInterface {
    @Override
    public void sayHello() {
        System.out.println("Hello, World");
    }
}
```

Proxy

```
import java.lang.reflect.Proxy;
public class DynamicProxyExample {

    public static void main(String[] args) {
        new DynamicProxyExample ().go();
    }

    void go() {
        // creare l'oggetto target
        DinamicProxyInterface hello = new DinamicProxyConcreteClass();

        // creare l'handler di invocazione
        InvocationHandlerExample handler = new InvocationHandlerExample(hello);

        // creare il proxy
        DinamicProxyInterface proxy = (DinamicProxyInterface) Proxy.newProxyInstance(
            DinamicProxyInterface.class.getClassLoader(),
            new Class[] {DinamicProxyInterface.class},
            handler);

        // usare il proxy
        proxy.sayHello();
    }
}
```

InvocationHandler

```
import java.lang.reflect.InvocationHandler;
import java.lang.reflect.Method;
public class InvocationHandlerExample implements InvocationHandler {
    private final Object target;
    public InvocationHandlerExample (Object target) {
        this.target = target;
    }
    @Override
    public Object invoke(Object proxy, Method method, Object[] args) throws Throwable {
        System.out.println("u were invoking the method: " + method.getName());
        Object result = method.invoke(target, args);
        System.out.println("success, method (" + method.getName() + ") get invoked");
        return result;
    }
}
```