# Drools Understanding Execution Control in Drools using Simple Example

Overview

In [previous chapter](https://www.javainuse.com/drools/drools_attributes) we implemented a drools project to understand various attributes like salience. In this tutorial we will try to understand the execution controls statements in Drools agenda-group, ruleflow-group and activation-group.  
If your KieBase defines multiple rules and if you want to selectively execute a subset of them, Drools provides several features to accomplish that.

* agenda-group:This is an optional keyword. It can be assigned for all rules. If not assigned to any agenda group, the rule by default belongs to main agenda.
* ruleflow-group: This behaves exactly similar to agenda-group, except that it is generally used for rules used from jBPM process flows.
* activation-group is a reserved keyword in drools drl file. There can be a single rule or multiple rules that can belong to a particular activation-group. Rules that belong to activation-group fire in similar fashion to "if..else if..else" block in java. In an activation group only one rule can fire at a time

Lets Begin

Understanding activation-group

For our example here we will use the example of [jewellery shop we used before](https://www.javainuse.com/drools_hello_kie). We will be modifying the files as follows-  
In the drl file we add the salience attribute and activation-group.

package com.rule

import com.javainuse.model.Product

rule "Offer for Diamond"

when

productObject: Product(type=="diamond")

then

productObject.setDiscount(15);

end

rule "Offer for Gold"

salience 1

**activation-group "gold"**

when

productObject: Product(type=="gold")

then

productObject.setDiscount(productObject.getDiscount() + 5);

System.out.println("Offer for Gold");

end

rule "Offer for Gold on Festival"

salience 2

**activation-group "gold"**

when

productObject: Product(type=="gold") && Product(event=="sale")

then

productObject.setDiscount(productObject.getDiscount() + 5);

System.out.println("Offer for Gold on Festival");

end

So in the drl file we have a single activation group named gold. For this activation group only a single rule with higher salience will get fired. So above only the rule "Offer for Gold on Festival" with salience 2 gets fired, while rule "Offer for Gold" with salience 1 does not get fired.  
