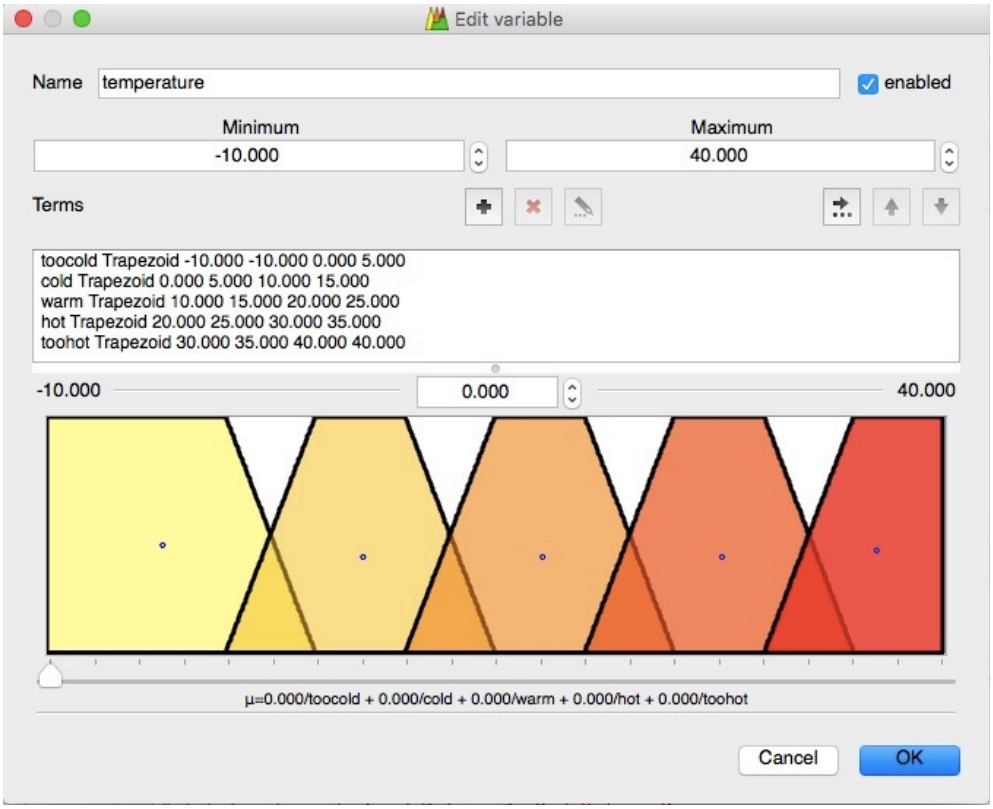
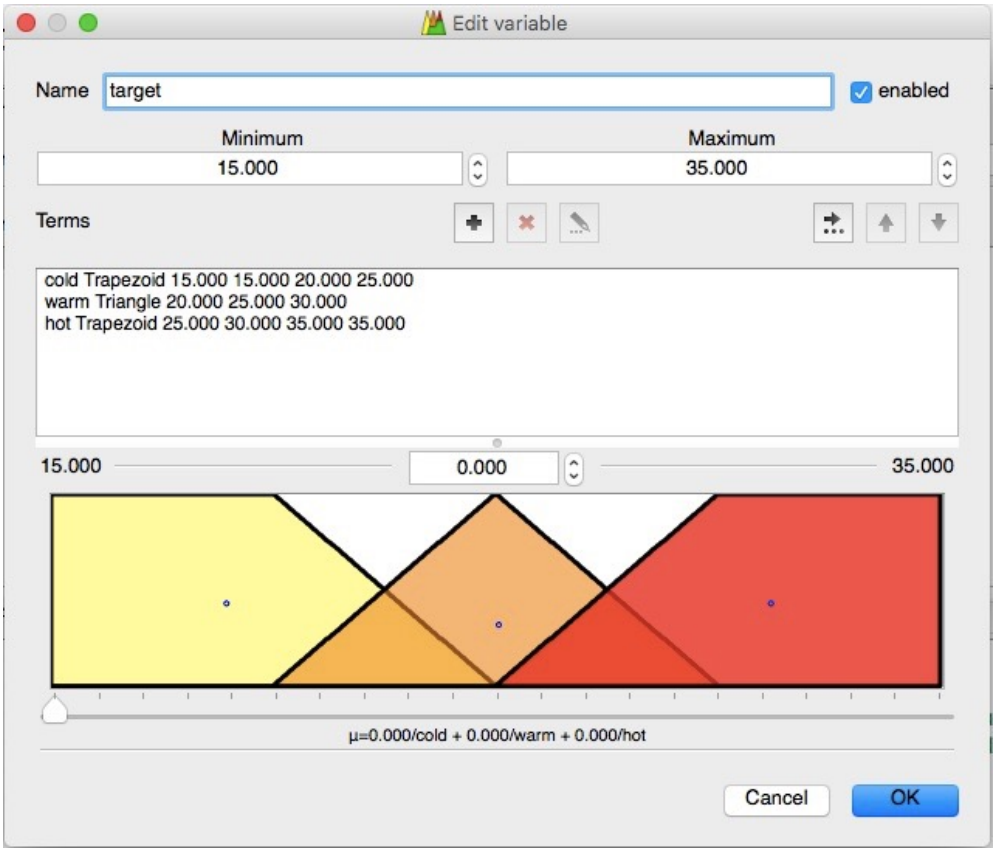
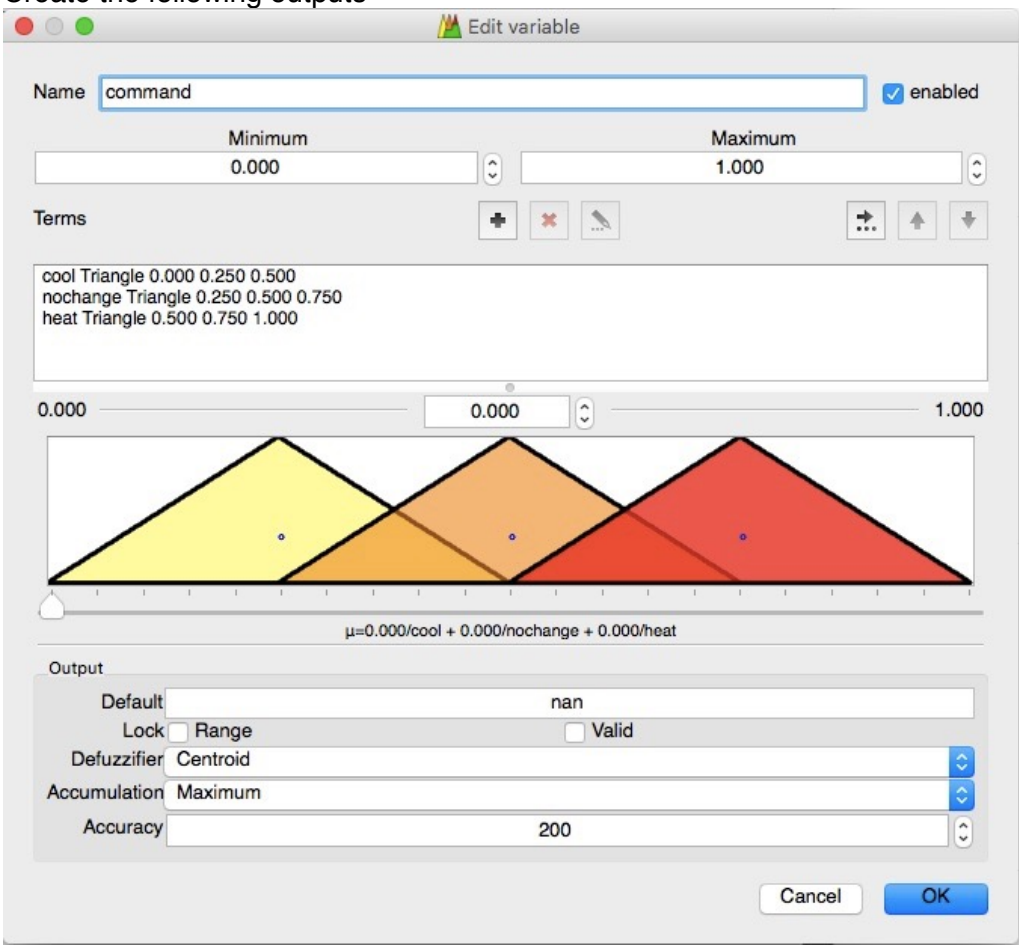
Lab 2 - Fuzzy Logic Air Conditioner

1. Install *qtfuzzylite version 4.0* from http://www.fuzzylite.com/downloads
2. Create a new project called “Air Conditioner”
3. Create the following inputs and membership functions





4. Create the following outputs



5. Write the following rules for the system

if (temperature is toocold) then command is heat

if (temperature is toohot) then command is cool

if (temperature is toocold or temperature is cold) and (target is warm) then command is heat

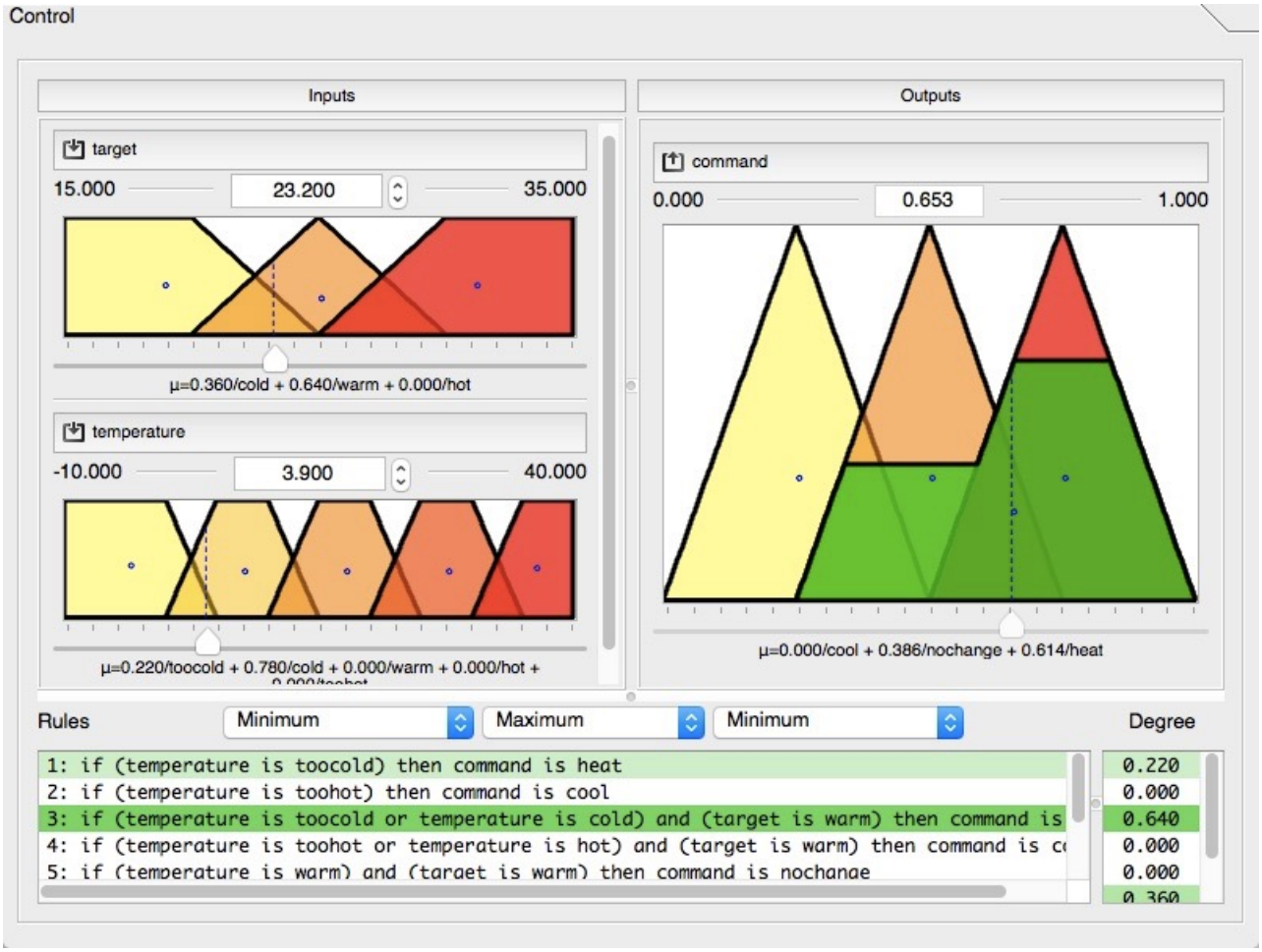
if (temperature is toohot or temperature is hot) and (target is warm) then command is cool

if (temperature is warm) and (target is warm) then command is nochange

if (temperature is cold) and (target is cold) then command is nochange

if (temperature is hot) and (target is hot) then command is nochange

6. *Test the system to ensure it gives the correct output.*



7. Save your project and export the Fuzzy Logic as a Java source code file.
File -> Export to…->jfuzzylite