library(FuzzyR)

library(FuzzyNumbers)

fis= newfis('Artificial Psychologist')

fis= addvar(fis, 'input', 'Childhoodtraumaexperience', c(0,10))

fis= addvar(fis, 'input', 'Alexithymia', c(0,10))

fis= addvar(fis, 'output', 'Painfeeling', c(0,30))

fis= addmf(fis, 'input', 1, 'low', 'gaussmf', c(2,0))

fis= addmf(fis, 'input', 1, 'middle', 'gaussmf', c(2,7))

fis= addmf(fis, 'input', 1, 'high', 'gaussmf', c(4,10))

fis= addmf(fis, 'input', 2, 'mild', 'trapmf', c(0,1,2,3))

fis= addmf(fis, 'input', 2, 'severe', 'trapmf', c(5,8,10,10))

fis= addmf(fis, 'output', 1, 'little', 'trimf', c(0,3,8))

fis= addmf(fis, 'output', 1, 'average', 'trimf', c(8,13,18))

fis= addmf(fis, 'output', 1, 'much', 'trimf', c(18,23,30))

rules= rbind(c(1,1,1,0.75,1), c(2,0,2,1,2), c(3,2,3,0.4,2))

rules

fis= addrule(fis, rules)

showfis(fis)

showrule(fis)

evalfis(c(4,5), fis)

evalfis(rbind(c(4,5), c(5,7)), fis)

gensurf(fis)