**Fuzzy Inference System Design**

You are tasked with designing a fuzzy light controller for a smart home system. The controller should adjust the brightness level of a light bulb based on two input variables: "Ambient Light" and "User Preference". The system should have five fuzzy rules to determine the brightness level as "Dim", "Low", "Medium", "High", or "Bright".

**Input Variables:**

Ambient Light:

Dark: 0-50 Lux

Dim: 40-150 Lux

Bright: 100-500 Lux

User Preference:

Dim: 0-30

Low: 20-50

Medium: 40-70

High: 60-90

Bright: 80-100

**Output Variables:**

Brightness level: 0-100 ("Dim", "Low", "Medium", "High", or "Bright")

Fuzzy Rules:

IF Ambient Light is Dark AND User Preference is Dim THEN Brightness is Dim

IF Ambient Light is Dark AND User Preference is Low THEN Brightness is Low

IF Ambient Light is Dim AND User Preference is Low THEN Brightness is Dim

IF Ambient Light is Dim AND User Preference is Medium THEN Brightness is Medium

IF Ambient Light is Bright AND User Preference is Bright THEN Brightness is Bright