## ilong to be on the desire of the desire FUZZY LOGIC - IMAGIE PROCESSING such as extraoring of contraction of the desired of the form

En: No: 9

Alw:

The aim of implementing fuzzy logic for edge detection is to enhance the ordenstness and accuracy of edge detection in images by handling uncertainities in pixel instenstity transections

2 Muzza waver.

Procedure for Fuzzy logic Edge detection. To Step 1: get up the environment solumno for

1. Open MATLAB: Ensure you have access to MATLAB with the image processing toolbox and fuzzy logic toolbox installed.

Step 2: Import and convert Prage to Grayscale

- 1. Read the RGB Image
- 2. convert the Grayscale

step 3: convert image to double. precision data 1. convert to double

9 tep 4: Obtain image gradient

- 1. Define Goodient filters:
- e. calculate condients
- 3. Plot image gradients

stept: Define fuzzy inference System (FCS) for edge detection.

- created #19 issues and you will whate
- Add inputs 2.
- Define membership function for inputs
- A. Add output
- 5. perfine membership functions for output
- 6. Plot membership functions

Step 6: Specify FIS rules

- 10 Add rules for FIS is usided a labour many of
- Step 7: Evaluate FIS
- 1. Evaluate edge detection

step 8: Plot results

1. Plot original Grayscale Image

1000 - Wine , 000

2. Plot detected edges will will any in The deliver in way of more top, house. I

Result:
The programs was successfully executed and
the programs was successfully executed and
and our is verified.