

PRAKTIKUM #12

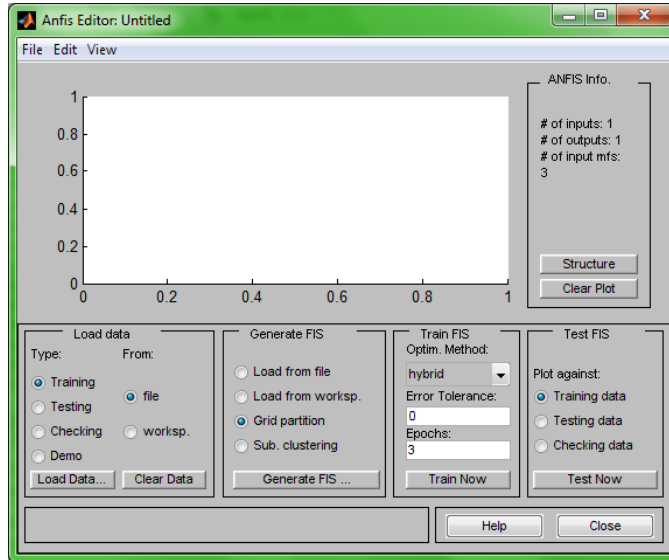
ANFIS

DEPRTEMEN ILMU KOMPUTER
INSTITUT PERTANIAN BOGOR

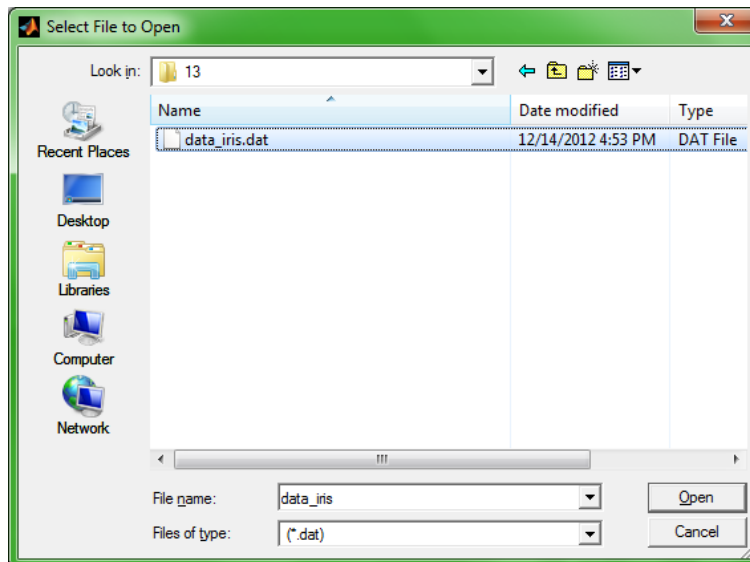
ANFIS

- ANFIS digunakan untuk mengoptimalkan parameter Fuzzy
- Pada praktiknya ANFIS digunakan untuk proses klasifikasi
- Model fuzzy yang digunakan adalah sugeno
- Diberikan data set (data_iris.dat):
 - Jenis Iris : Iris Setosa, Iris Virginica, Iris Versicolor

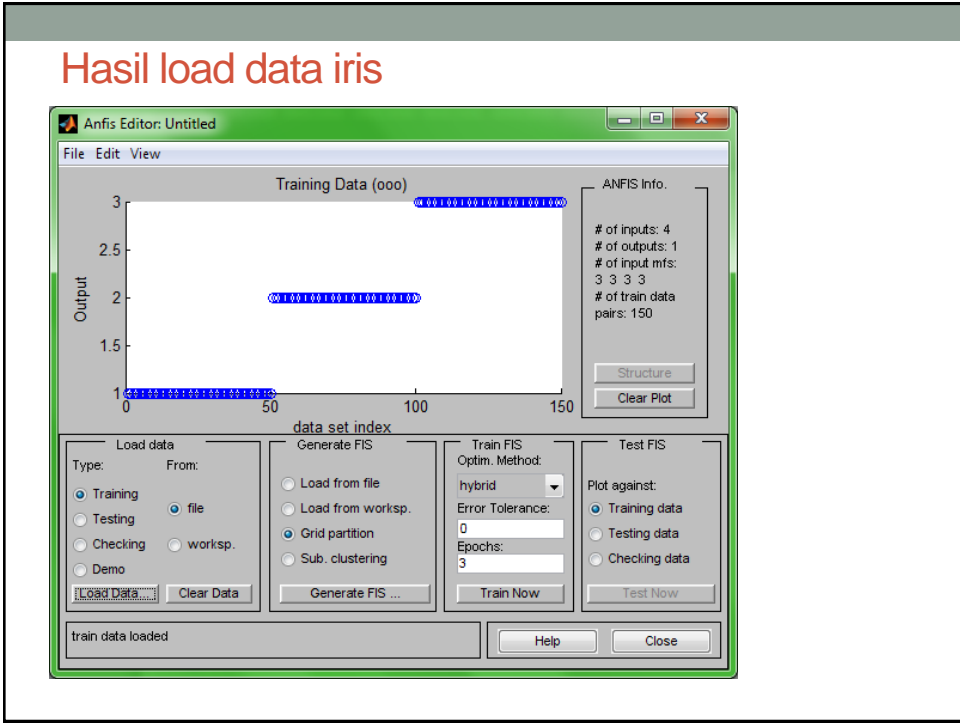
Gunakan : **anfisedit** pada command line



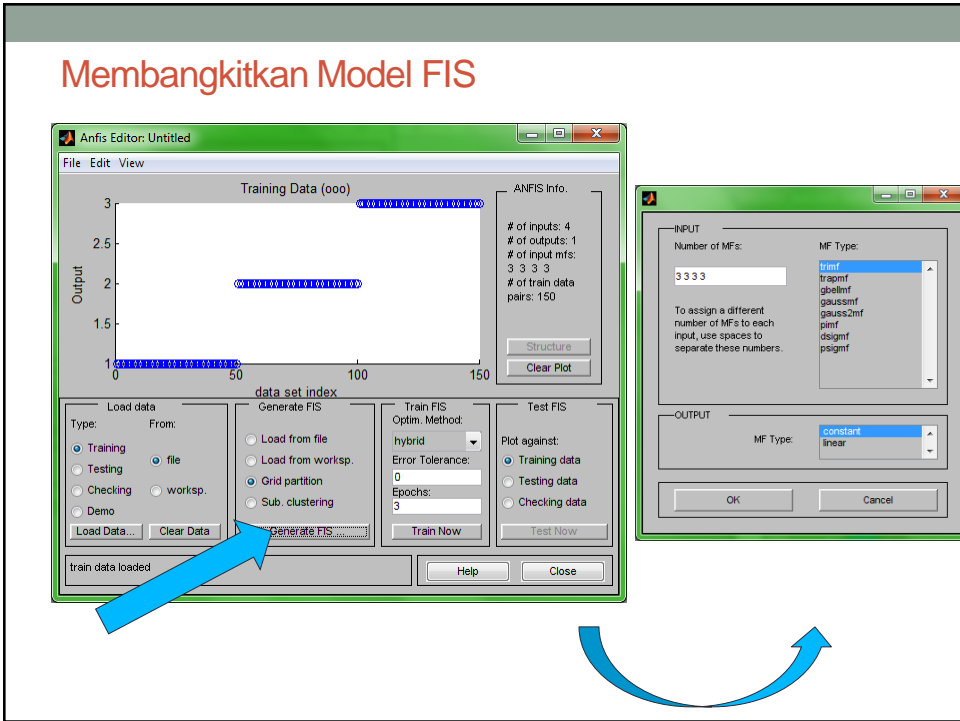
Pada menu load data : pilih load data



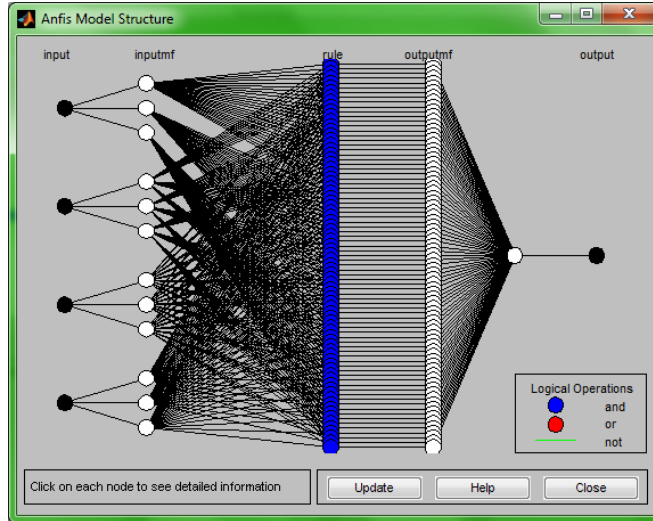
Hasil load data iris



Membangkitkan Model FIS



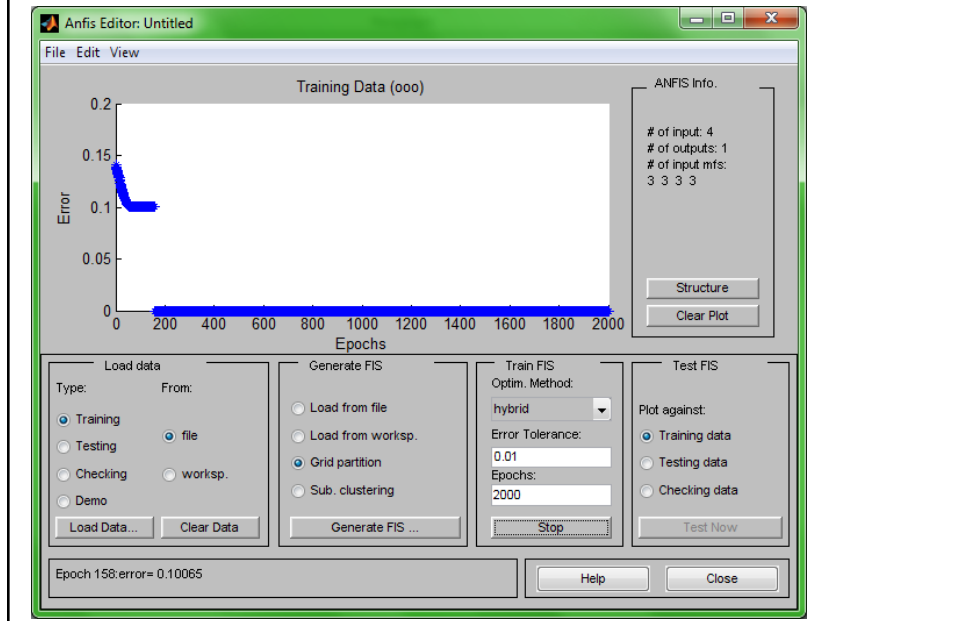
Struktur ANFIS : klik structure



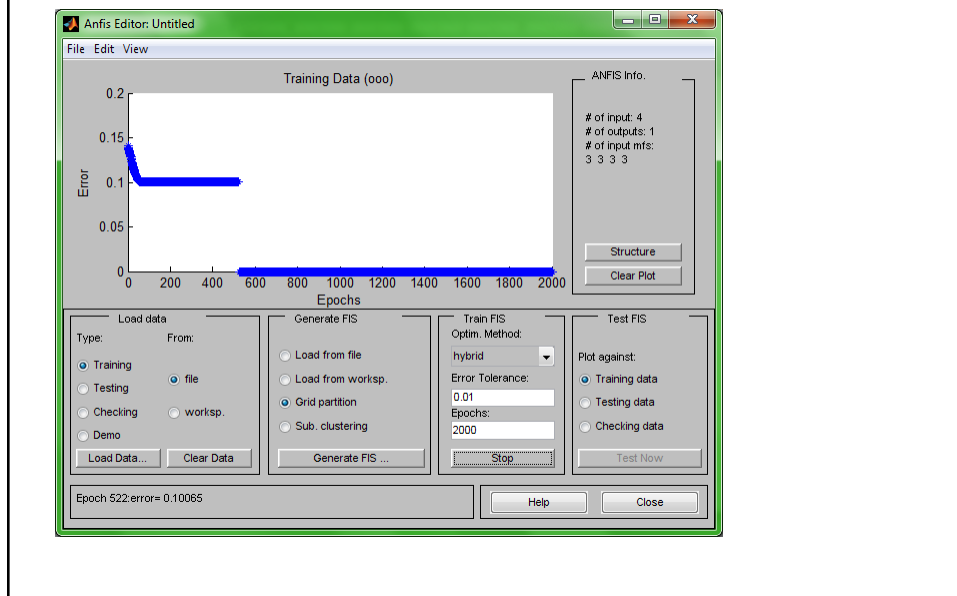
Melakukan Training

The screenshot shows the 'Anfis Editor: Untitled' window. The main area displays a plot of 'Training Data (ooo)' with 'Output' on the y-axis (ranging from 1 to 3) and 'data set index' on the x-axis (ranging from 0 to 150). The plot shows two horizontal lines of data points. To the right, 'ANFIS Info.' is displayed: '# of input: 4', '# of outputs: 1', and '# of input mfs: 3 3 3'. Below the plot are buttons for 'Structure' and 'Clear Plot'. On the right side, a 'Train FIS' panel is shown with the following settings: 'Optim. Method: hybrid', 'Error Tolerance: 0.01', and 'Epochs: 2000'. A 'Train Now' button is at the bottom of this panel. The bottom of the window contains sections for 'Load data', 'Generate FIS', 'Train FIS', and 'Test FIS', each with various options and buttons. A status bar at the bottom left says 'a new fis generated'.

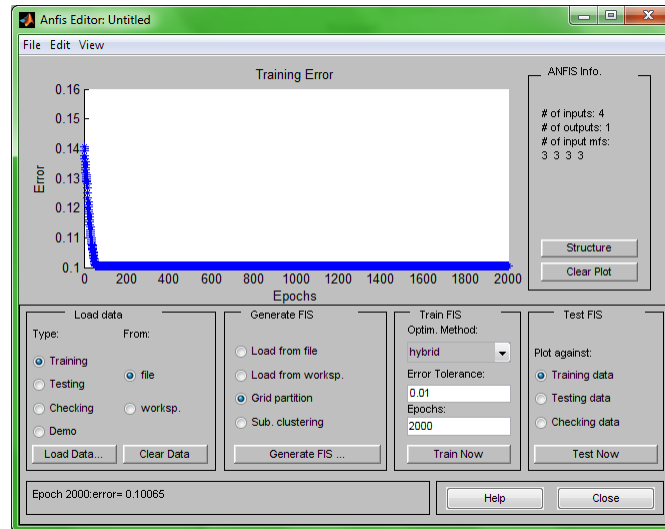
Proses Training



Proses Training (Cont'...)



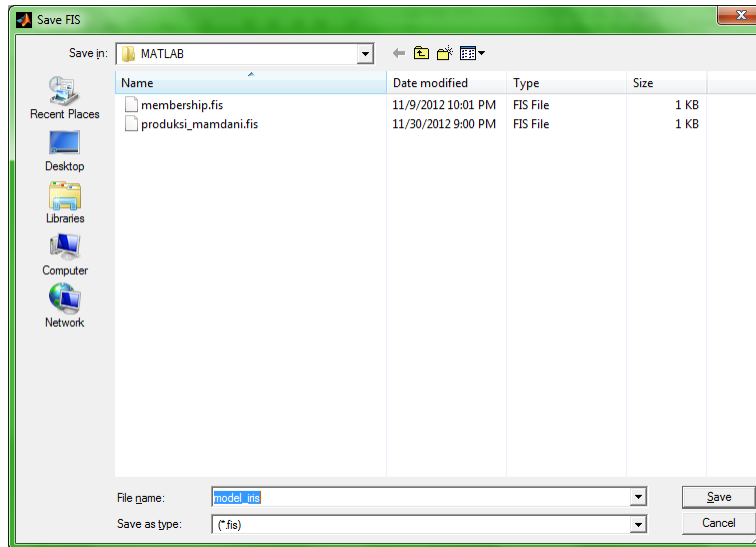
Hasil Proses Pelatihan



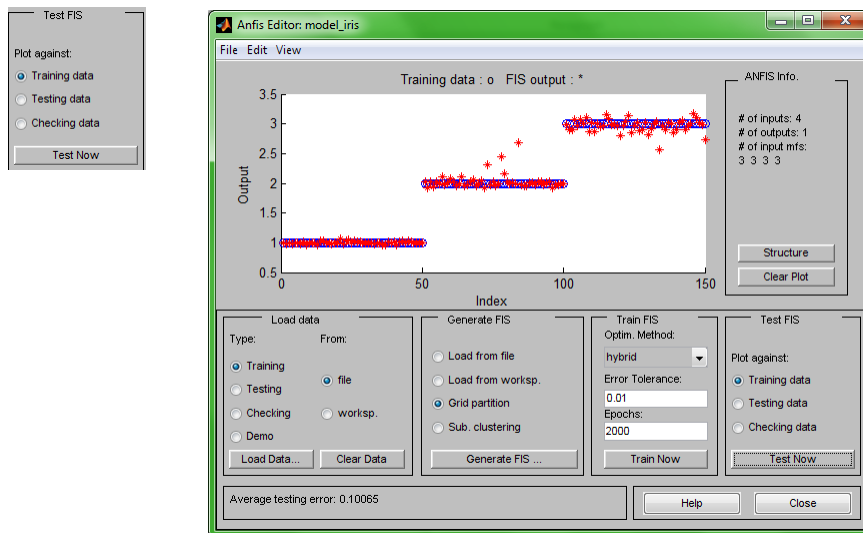
Kriteria Berhentinya Proses Pelatihan

- Error Minimum
- Epoch Maksimum

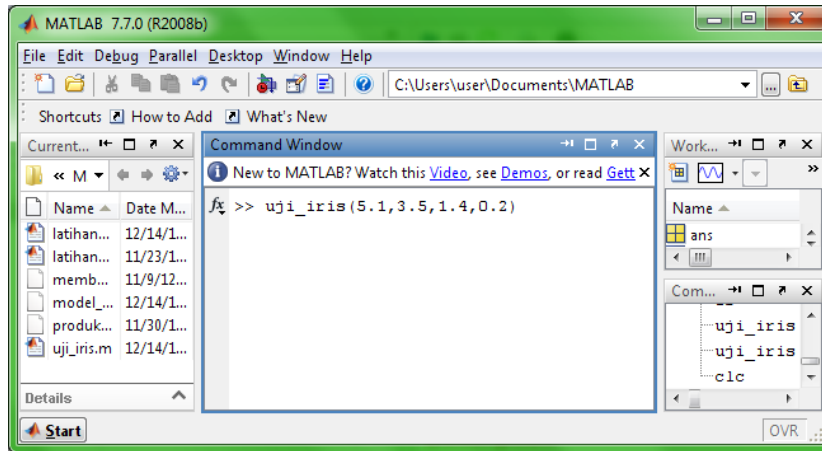
Menyimpan Model { Ctrl + S }



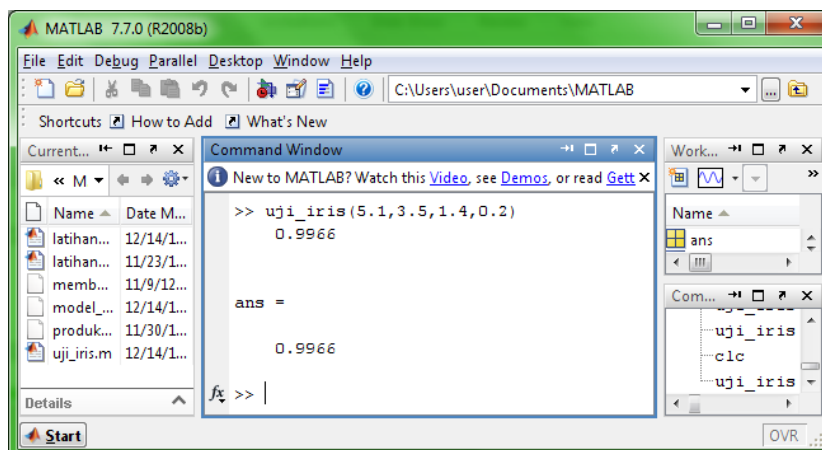
Menguji Data Training



Lakukan Uji pada Command Line



Hasil Identifikasi



Apa Artinya ??? : Iris Setosa

Tugas Kelompok

1. Lakukan Percobaan pada Data Irisi di atas !
2. Bagi dari data setiap kelas menjadi 80% data Latih dan 20% Data Uji !
3. Lakukan Pelatihan pada data latih dan lakukan pengujian pada data Uji !
4. Buat Matrik Konfusi ! Hitung Akurasi (dalam persen)

Dikumpulkan minggu depan dalam bentuk Laporan Tertulis

Terima Kasih