```
out(k,1) = evalfis([R1(k,1) R2(k,1) R3(k,1) R4(k,1)],fis);
end
end
disp('Program for DGA analysis')
disp('========================')
disp('Doernenburg')
disp('==========')
RR = [R1 R2 R3 R4 out];
fprintf(' TR    R1    R2    R3   R4    Condition     \n');
fprintf('===   ===   ===   ===   ===   ========      \n');
for k=1:N;
fprintf('%d   %.2f   %.2f   %.2f   %.2f   %.2f  \n', k, R1(k,1),
R2(k,1), R3(k,1), R4(k,1), out(k,1));
end
disp('Fault Type')
disp('==========')
disp('0,1: No FaultORNaN')
disp('2: Partial Discharg ')
disp('3: Arcing ')
disp('4: Thermal ')
disp('_____________________________________')
for k=1:N;
fis = readfis('Roger');
out1(k,1) = evalfis([R1(k,1) R2(k,1)  R5(k,1)],fis);
end
disp('ROGER')
disp('==========')
RR = [R1 R2 R5  out1];
fprintf(' TR    R1    R2    R5    Condition     \n');
fprintf('===   ===   ===   ===    ========      \n');
for k=1:N;
fprintf('%d   %.2f   %.2f   %.2f     %.2f  \n', k, R1(k,1), R2(k,1),
R5(k,1), out1(k,1));
end
disp('_____________')
disp('Fault Type')
disp('1: No Fault ORNaN'')
disp('2: Partial discharge')
disp('3: Arcing ')
disp('4: Low temp. thermal ')
disp('5: Thermal>700 oC ')
disp('6: Thermal<700oC ')
disp('_____________________________________________________________')
```