training = load('C:\Users\KIRTHI\Desktop\iris\_damage.txt');

B = training(:,[1,2,3,4]);

s = size(B);

len = s(1);

col = 5;

display("Enter the following attributes to predict the class of IRIS flower");

sepal\_length = str2double(input("Enter the sepal\_length in cms only\n","s"));

sepal\_width = str2double(input("Enter the sepal\_width in cms only\n","s"));

petal\_length = str2double(input("Enter the petal\_length in cms only\n","s"));

petal\_width = str2double(input("Enter the petal\_width in cms only\n","s"));

A = zeros(1,4);

A(1) = sepal\_length;

A(2) = sepal\_width;

A(3) = petal\_length;

A(4) = petal\_width;

distance\_and\_class = zeros(len,2);

for i = 1:len

j=1;

vector = B(i,:);

distance = norm(A-vector,2);

distance\_and\_class(i,j) = distance;

distance\_and\_class(i,j+1) = training(i,col);

endfor

for i=1:1:len-1

for j=1:1:len-1

min = distance\_and\_class(j,1);

clas = distance\_and\_class(j,2);

if distance\_and\_class(j+1,1) < min

temp\_dis = distance\_and\_class(j,1);

temp\_class = distance\_and\_class(j,2);

distance\_and\_class(j,1) = distance\_and\_class(j+1,1);

distance\_and\_class(j,2) = distance\_and\_class(j+1,2);

distance\_and\_class(j+1,1) = temp\_dis;

distance\_and\_class(j+1,2) = temp\_class;

endif

endfor

endfor

req = distance\_and\_class;

k = 3;

count\_0 = 0;

count\_1 = 0;

count\_2 = 0;

if(k == 1)

result = req(1,2);

if (result == 0)

display('Iris\_vero');

elseif(result == 1)

display('Iris-sero');

else

display(" Iris-keto ");

endif

else

for iter=1:k

result = req(1,2);

if(result == 0)

count\_0 = count\_0 + 1;

elseif(result == 1)

count\_1 = count\_1+1;

else

count\_2 = count\_2+1;

endif

endfor

if(count\_0 > count\_1 && count\_0 > count\_2)

display("Iris Setosa");

elseif(count\_1 > count\_0 & count\_1 > count\_2)

display("Iris Versicolour");

elseif(count\_2 > count\_0 & count\_2 > count\_1)

display("Iris-Virginica");

endif

endif