11-01-2018

MECE101 Final Exam

Name:

Surname:

Number:

**Q1)** The MATLAB function code given below is a sorting (in Turkish sıralama) algorithm

function[vector\_output,counter]=optimum\_siralama\_sinav(vector)

counter=0;

length\_vector=length(vector);

for j=1:length\_vector-1

for i=1:length\_vector-j,

if vector(i)>vector(i+1),

degisen\_vector=vector(i);

vector(i)=vector(i+1);

vector(i+1)=degisen\_vector;

counter=counter+1;

else

end

end

end

vector\_output=vector

This function is called in MATLAB where vector=[4 5 2 3 1]

[vector\_output,counter]=optimum\_siralama\_sinav(vector)

Find ‘vector\_output’ and ‘counter’ (50 points)

**Q2)** The MATLAB function code is given below:

function output2=function\_exam\_q2(a,b,n)

for i=1:n,

output2(i)=a\*b;

a=b;

b=output2(i);

end

end

This function is called in MATLAB as

output2=function\_exam\_q2(1,2,5)

Find the value of ‘output2’ (50 points)