**AIM:** Write an M–file to store the vectors (–1 –1 –1 –1) and (–1 –1 1 1) in an auto associative net. Find the weight matrix. Test the net with (1 1 1 1) as input.

**SOURCE CODE:**

x=[–1 –1 –1 –1;–1 –1 1 1];

t=[1 1 1 1];

w=zeros (4, 4);

for i=1:2

w=w + x(i,1:4)'\*x(i,1:4);

end

yin = t\*w;

for i=1:4

if yin(i)>0

y(i)=1;

else

y(i)=–1;

end

end

print ('The calculated weight matrix');

print (w);

if x(1,1:4)==y(1:4) | x(2,1:4)==y(1:4):

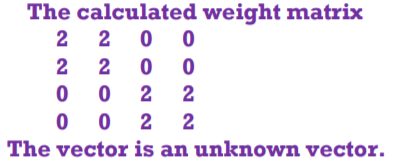
print ('The vector is a Known Vector');

else:

print ('The vector is a unknown vector');

end

**OUTPUT:**

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