function[cost,x]=northwest\_corner(cost\_matrix, supply, demand)

[m,n]=size(cost\_matrix);

x=zeros(m,n);

i=1;

j=1;

while i<=m && j<=n

if supply(i)<demand(j)

x(i,j)=supply(i);

demand(j)=demand(j)-supply(i);

supply(i)=0;

i=i+1;

elseif supply(i)>demand(j)

x(i,j)=demand(j);

supply(i)=supply(i)-demand(j);

demand(j)=0;

j=j+1;

else

x(i,j)=supply(i);

supply(i)=0;

demand(j)=0;

i=i+1;

j=j+1;

end

end

cost=sum(sum(x.\*cost\_matrix));

end

cost\_matrix=[4,6,8;5,7,6;8,6,9];

supply=[20;30;50];

demand=[30,20,50];

[cost,x]=northwest\_corner(cost\_matrix,supply,demand);

disp(cost);

disp(x);