SRIHARSHITHA(19BCD7246) - LAB3 - SLOT(L6)

```
% Max z = 3x1 + 2x2
% s.t.c
% x1 + x2 <= 4
% x1 - x2 <= 2
% x1, x2 >= 0
% 1. Find the initial matrix
% 2. Find the pivot row
% 3. Find the pivot column
% 4. Find the entering variable

n=2;
C=[3 2];
I=[1 1;1 -1];
b=[4;2];
s=eye(size(I,1));
A=[I s b];
cost=zeros(1,size(A,2));
cost(1:n)=C;
BV=1+n:1:size(A,2)-1;
ZjCj=cost(BV)*A-cost;
ZCj=[ZjCj;A];
simp=array2table(ZCj);
simp.Properties.VariableNames(1:size( ZCj,2))={'x1','x2','s1','s2','sol'};
disp(simp);
if any(ZjCj<0)
ZC=ZjCj(1:end-1);
[Entercol,pvtcol]=min(ZC);
fprintf('The minimum element in Zj-Cj row is %d and in corresponding
 column is %d\n',Entercol,pvtcol);
fprintf('The entering variable is %d\n',pvtcol);
else
disp('Optimal solution')
end
```

```
    x1    x2    s1    s2    sol
    __    __    __    __    ___

    -3    -2    0     0      0
     1     1    1     0      4
     1    -1    0     1      2

The minimum element in Zj-Cj row is -3 and in corresponding column is
 1
The entering variable is 1
```

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