function [SOLC]=solver1(C)

% input: C,

% Experimental response, binary vector 1 by 6. The first five

% columns in the order of the design matrix, and the sixth

% coordinate equal to 1.

% output: SOLC,

% Binary vector 1 by 10.

% '0' sample negative.'1' sample to be analysed individually.

% V.1 March 21, 2023

% design matrix

R6F10= [0,0,1,0,0,0,1,1,0,1

1,1,0,1,0,0,0,0,0,1

0,0,1,1,1,0,0,0,1,0

1,0,0,0,1,1,0,1,0,0

0,1,0,0,0,1,1,0,1,0

1,1,1,1,1,1,1,1,1,1];

IT1=C;

for i=1:6

MS(i,:)=R6F10(i,:);

if IT1(i)==0

for j=1:10

if R6F10(i,j)== 1

MS(i,j)=2;

end

end

end

end

S=ones(1,10);

for j=1:10

if max(MS(:,j))== 2

S(j)=0;

end

end

SOLC=S;

end