% write the main function to be minimised here

function F = myfun(x)
F = 100*(x(1)^2-x(2))^2+(1-x(1))^2;

% THIS FUNCTION IS the main fun for DBC
% depending upon the variables the no of axes is being chosen like for single - i is sufficient, double - i,j is required, three - i,j,k is being used. The step size is being defined by no of bees go for exploration and the range of search region like if we have to find min b/w 1 to 2 and no of bees go for exploration is 10 then the step size is 0.1 so put the step size in this code where you specify the i. The functions is being used here for searching minimum is "fmincon"

ii=0;
h=@myfun;

options = optimset('Algorithm','active-set','MaxFunEvals',10^5);
for i= -30:10:30
    for j= -30:10:30
        [z,FVAL]=fmincon(h,[i+1 j+1],[],[],[],[],[],[],@confuneq,options);
        ii=ii+1;
        t(ii)=ii;
        d(ii)=-FVAL;
        s(ii)=FVAL;
        if (ii==1)
            zz=z;
            ss=s(ii);
        elseif (s(ii)<ss)
            zz=z;
            ss=s(ii);
        end
    end
end

q1=zz
final= myfun(q1)