function [optchangepoints] = M\_Loop(utility, celldata)

for n=1:length(celldata)

for j=1:n

if j==1

max = utility(celldata,1,n);

lastchange(n)=1; %#ok<AGROW>

else if opt(j-1)+utility(celldata,j,n) >= max

max = opt(j-1)+utility(celldata,j,n);

lastchange(n)= j; %#ok<AGROW>

end

end

end

opt(n)=max; %#ok<AGROW>

end

j=length(lastchange);

optchangepoints = lastchange(j);

while lastchange(j)>1

j=lastchange(lastchange(j)-1);

optchangepoints=[j optchangepoints]; %#ok<AGROW>

end