

From the pseudocode below and the Matlab functions provided, implement Annealing search for the Tasks & Workers problem. Test the implementation for different initial conditions and different values of N (add tasks and workers at your choice)

```
rand('seed', 1)  
Current=randperm(N);
```

- How do you calculate ΔE ?
- Find the optimal values for T and T_{min} to find the solution.
- Plot the evolution of T.

Algorithm SA

```
Initiate T, T_min  
Current= random state  
while (T>T_min) & INCLUDE MORE STOP CRITERIA  
    New = Random successor  
    if  $\Delta E < 0$   
        Current=New  
    else  
        %% Accept New with probability p  
        p=exp(- $\Delta E/T$ )  
        if p>rand  
            Current=New  
        end_if  
    end_if  
    enfriar(T)  
end_while  
return Actual
```