JAVA 学习之基本程序设计结构

1. 写一个函数将以下文件转换成所需格式并写入新文件中。
读入文件：instance.txt

输出文件样式:output.txt
L=0, U=1

输出文件格式:
[|N|, |E|, |K|, C, Q]
[r_1, r_2]
[c_1, c_2]
[p_1^e, p_2^e]
[1,2,...,i,...,n]
[O_x_1,O_x_2,..,O_x_i,..,O_x_n]
[O_y_1,O_y_2,..,O_y_i,..,O_y_n]
[D_x_1,D_x_2,..,D_x_i,..,D_x_n]
[D_y_1,D_y_2,..,D_y_i,..,D_y_n]
[P_x_0,P_x_1,P_x_2,..,P_x_i,..,P_x_e]
[P_y_0,P_y_1,P_y_2,..,P_y_i,..,P_y_e]
[a_1,a_2,..,a_i,..,a_n]
[b_1,b_2,..,b_i,..,b_n]
[lu_1,lu_2,..,lu_i,..,lu_n]

2. 写一个函数读取上述格式文件，并在原文件中以同样格式追加以下数据。
数据生成公式如下:

$$s\_i=\frac{\sqrt{(O\_x\_i-D\_x\_i)^2+(O\_y\_i-D\_y\_i)^2}}{30*1000/3600}$$

$$t\_ij=\begin{cases}0 & \text{if } i<j\\ \dfrac{\sqrt{(D\_x\_i-O\_x\_j)^2+(D\_y\_i-O\_y\_j)^2}}{30*1000/3600} & \text{otherwise}\end{cases}$$

$$t\_ig=\frac{\sqrt{(D\_x\_i-P\_x\_g)^2+(D\_y\_i-P\_y\_g)^2}}{30*1000/3600}$$

$$t\_gj=\frac{\sqrt{(P\_x\_g-O\_x\_j)^2+(P\_y\_g-O\_y\_j)^2}}{30*1000/3600}$$

$$w\_e\_ij=\begin{cases}0 & \text{if } i=j\\ \sqrt{(P\_x\_i-O\_x\_(j-1))^2+(P\_y\_i-O\_y\_(j-1))^2}*281/120000 & \text{if } i=0, j\neq 0\\ \sqrt{(D\_x\_(i-1)-P\_x\_j)^2+(D\_y\_(i-1)-P\_y\_j)^2}*281/120000 & \text{if } j=0, i\neq 0\\ \sqrt{(D\_x\_(i-1)-O\_x\_(j-1))^2+(D\_y\_(i-1)-O\_y\_(j-1))^2}*281/120000 & \text{otherwise}\end{cases}$$

$$w\_e\_ig=\begin{cases}\sqrt{(P\_x\_0-P\_x\_g)^2+(P\_y\_0-P\_y\_g)^2}*281/120000 & \text{if } i=0\\ \sqrt{(D\_x\_(i-1)-P\_x\_g)^2+(D\_y\_(i-1)-P\_y\_g)^2}*281/120000 & \text{otherwise}\end{cases}$$

$$w\_e\_gj=\begin{cases}\sqrt{(P\_x\_0-P\_x\_g)^2+(P\_y\_0-P\_y\_g)^2}*281/120000 & \text{if } j=0\\ \sqrt{(O\_x\_(j-1)-P\_x\_g)^2+(O\_y\_(j-1)-P\_y\_g)^2}*281/120000 & \text{otherwise}\end{cases}$$

$$w\_prime\_i=\sqrt{(O\_x\_i-D\_x\_i)^2+(O\_y\_i-D\_y\_i)^2}*281/120000$$

追加数据格式:
[s_1,s_2,..,s_i,..,s_n]
[[t_00,t_01,..,t_0j,..,t_0n],[t_10,t_11,..,t_1j,..,t_1n],…,[t_i0,t_i1,..,t_ij,..,t_in],…,
[t_n0,t_n1,..,t_nj,..,t_nn]]
[[t_10,t_11,..,t_1g,..,t_1e],…,[t_i0,t_i1,..,t_ig,..,t_ie],…,[t_n0,t_n1,..,t_ng,..,t_ne]]
[[t_01,..,t_0j,..,t_0n],[t_11,..,t_1j,..,t_1n],…,[t_g1,..,t_gj,..,t_gn],…,[t_e1,..,t_ej,..,t_en]]
[[w_e_00,w_e_01,..,w_e_0j,..,w_e_0n],[w_e_10,w_e_11,..,w_e_1j,..,w_e_1n],…,
[w_e_i0,w_e_i1,..,w_e_ij,..,w_e_in],…,[w_e_n0,w_e_n1,..,w_e_nj,..,w_e_nn]]
[[w_e_00,w_e_01,..,w_e_0g,..,w_e_0e],[w_e_10,w_e_11,..,w_e_1g,..,w_e_1e],…,
[w_e_i0,w_e_i1,..,w_e_ig,..,w_e_ie],…,[w_e_n0,w_e_n1,..,w_e_ng,..,w_e_ne]]
[[w_e_00,w_e_01,..,w_e_0j,..,w_e_0n],[w_e_10,w_e_11,..,w_e_1j,..,w_e_1n],…,
[w_e_g0,w_e_g1,..,w_e_gj,..,w_e_gn],…,[w_e_e0,w_e_e1,..,w_e_ej,..,w_e_en]]
[w_prime_1,w_prime_2,..,w_prime_i,..,w_prime_n]