

Suyog Joshi
CS-521
Assignment 3
11/01/2024

REPORT

There are two files PAM2 and PAM4 for $k=2$ and $k=4$ respectively.

- 1) Report the indices of rows that are selected after the BUILD phase, when $K = 4$ and when $K = 2$.

K	Indices of rows that are selected
2	[4856, 12423]
4	[4856, 12423, 11580, 2597]

- 2) Report the number of iterations and the cost () after each iteration of the SWAP phase,
When $k=2$,

Iteration Count	Cost	S
1	155748.67	[14243, 5740]
2	155728.65	[5740, 15995]
3	-	[5740, 15995]

When $k=4$

Iteration Count	Cost	S
1	57797.4	[4856, 12423, 11580, 2597]
2	57783.04	[11580, 2597, 7429, 14714]
3	57781	[2597, 7429, 14714, 11407]
4	-	[2597, 7429, 14714, 11407]

- 3) Report the execution time of your code, when $K = 4$ and when $K = 2$.

K	Execution time for build phase (approx. mins)	Execution time for swap phase (approx. hrs)
2	5.45 mins	1.21 hrs
4	29 mins	5.57 hrs