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| Data Structures and Algorithms | Spring 2023 |

Data Structures and Algorithms

Project Phase1 Report

Team Name: 1 Number of Members : 3

Team E-mail: [myoussef9366@gmail.com](mailto:myoussef9366@gmail.com)

Members Info:

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| Member name | ID | Email |
| Youssef Tarek Mehany | 9220990 | youssef.abdelgaber02@eng-st.cu.edu.eg |
| Marwan Mohammed Alhameedy | 9220808 | marwan.alhameedy04@eng-st.cu.edu.eg |
| Muhammad Amr Hassan | 9220728 | muhammad.muhammad031@eng-st.cu.edu.eg |

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| List Name | Chosen DS | Justification |
| NEW | Queue | Since the processes are already sorted by arrival time  Insertion O(1)  Deletion O(1) |
| BLK | Queue | Because it is applying the FIFO technique |
| TRM | Queue | To put them according to termination time  (also we don’t need random access) |
| KILLSIG | Queue<Pair<int, int>> | Because the signals are sorted ascendingly |
| FCFS RDY | General List | Because we need to traverse on the list given the ID |
| SJF RDY | PriorityQueue | To sort them by shortest CPU time |
| RR RDY | Queue | Because it is a preemptive version on FCFS  and we don’t need random access |
| IO | Queue<Pair<int, int>> | Assuming that they are sorted in the input file |

Selected Data Structures