STC ASSIGNEMENT

Main Point :

In this course, i had the chance to explore the different sorting algorithms such as quicksort, mergesort, and heapsort have been discussed using various data structures of stacks, queues, and heaps in a unique way. These algorithms helped me get skilled at sorting data in the best way to have it processed efficiently. Mastery of these techniques provided a good grounding in the design of algorithms and problem-solving.
When we moved on to trees and graphs, I was confident; however, this part of the course wasn't that interesting and straightforward compared to the earlier sections of the course on sorting and data structures.

By the time we came to trees and graph algorithms, they were not quite as much fun as mastering the sorting algorithms but nevertheless formed very important tools in learning how data can be interrelated and traversed in nonlinear fashion. I liked breadth-first and depth-first searches a lot because they provided quite practical ways of exploring graphs. The real challenge, however, came when we got to things like polynomial-time problems and NP-completeness. These concepts, by necessity requiring a deeper understanding of computational theory than the preceding ones, were far harder to grasp, and I struggled to keep up.
I took the exam, but I unfortunately didn't do very well, and to be frank, I am really scared of failing this course. I have received two C grades already, so if I fail, I fear I may be excluded from the university, which has been giving me much cause for concern.

STC Point:

sorting algorithms make unsorted data ordered, in the same context, my daily practice of Transcendental Meditation brings order to my thoughts, allowing me to focus and remain calm in stressful situations. Meditation helps me in solving both academic problems and personal ones with a clear mind and high degree of mental efficiency. The repetition in meditation works like the repetitions of comparisons and swaps in sorting algorithms, leading the mind further down the levels of clarity and peace.

Equally important, getting enough hours of sleep and going to bed early helped my brain recharge. Just like computers, our minds need some downtime to perform optimally. More specifically, sleep provides "garbage collection" for the brain, cleaning up after the clutter from the day, somewhat like memory management in programming. Sleeping late disrupts this natural flow, much like running a poorly optimized algorithm, filled with

inefficiencies. Contrarily, going to bed early makes sure that my brain gets the right amount of time for its reset and preparation towards new challenges, much like a properly designed program running seamlessly right after cleaning up its memory usage.

Besides sleep and meditation, also we can't ignore regular sessions at the gym, specifically cardio exercises, have built up both my body and mind. Cardio workouts remind me about the significance of simplicity in program design. Just as a clear and straightforward workout routine helps me build endurance, a simple and clean program ensures efficiency and scalability. In contrast, weight training reminds me of enhancing a program's performance. Just as I slowly add more weights to get stronger, so too can a program be optimized step by step to decrease time complexity, making it even more efficient-like going from O(n^2) to O(n log n) in an algorithm's performance. Both in fitness and in coding, small improvements lead to big results over time.

Explanation of the Connection between computer science and stc :

My learning in algorithms and meditation practices became more clearly connected as the master program progressed; it is my sixth course with stc rules and guides. Sorting algorithms, such as quicksort and mergesort, helped to gain insight into how to methodically break down complicated problems into simpler parts. Just like meditation helps to break through layers of mental noise to a state of calm. The sorting algorithms enhanced my step-by-step thinking process, and with each new algorithm, I felt more confident and skillful. Sorting to trees and graphs was like going further in depth in understanding the organization of data and how things are connected.

However, with regards to polynomial time problems and NP-completeness, the complexity overwhelmed me, which is a feeling similar to mental overload when too much is happening at once. This is the point where my daily meditation helped the most. Meditation relaxes my mind, both in the early morning and at 4 p.m. after courses, in order for me to rebuild concentration and work on those difficult concepts. Moreover, I apply all the principles of the STC: a healthy diet from Argiro and regular sports and fitness exercises to keep my body in shape.This health, both mental, physical, and dietary, gave me energy and clarity to overcome many academic challenges and reach several personal goals.

Just like the sorting algorithm that turns messy data into order, meditation clears up my train of thought and allows me to more easily work under pressure. Beyond the class, meditation has also allowed me to balance out other areas of my life, such as my gym routine, soccer training, and goals of body transformation. My regular workouts have helped me bulk up from60 kg to 72 kg, and I've seen major improvements in my

physique, while meditation has supported my mental focus and reduced the stress of balancing everything.
Ultimately, as sorting algorithms organize data, Transcendental Meditation organizes my mind and helps me navigate through complex challenges, both academic and personal, a little more efficiently. Besides meditation, a focused approach toward leading a healthy lifestyle with good nutrition and fitness has been important in keeping my mind and body in sync for peak performance.completeness topics remain difficult, meditation provides me with the mental clarity to approach them without feeling overwhelmed.

Ω- Mohamed KADRI