

UCS415 – Design and Analysis of Algorithms

Lab Assignment 1

Write a program to implement iterative as well as recursive versions of the following algorithms:

- Binary search (<https://www.geeksforgeeks.org/binary-search/>),
- Merge sort (<https://www.geeksforgeeks.org/iterative-merge-sort/>), and
- Quick sort (<https://www.geeksforgeeks.org/iterative-quick-sort/>)

Additional Questions:

- <https://www.hackerearth.com/practice/algorithms/searching/binary-search/tutorial/>
- <https://www.hackerearth.com/practice/algorithms/sorting/merge-sort/tutorial/>
- <https://www.codechef.com/problems/MYSITM>
- <https://www.hackerearth.com/practice/algorithms/sorting/merge-sort/practice-problems/algorithm/median-game-june-easy-19-3722be60/>
- <https://www.hackerearth.com/practice/algorithms/sorting/quick-sort/practice-problems/algorithm/lex-finds-beauty-0d0bc1b6/>