Programming Assignment-1

1. Implement Quicksort Algorithm by
   1. Selecting first element as the pivot.
   2. Selecting a random element as the pivot.
   3. Selecting 2 pivots.
   4. Compare and report the running time of these three variants of the Quicksort algorithm. (10+10+10+10)
2. Write a program to add and subtract 2 very big numbers (more than 25 digits in a number) (test case 1 -> 818446744073709561615 and 325446744073809551615).Try implementing this with a link list. (10)

**Turn In**

1. Source code
2. README: Instruction for how to execute your program
3. Input and Output files
4. Report: A description of how you solved the problem and time and space complexity of your proposed solution.

Compress these files in a single .zip file and email it to me ([apurba@hyderabad.bits-pilani.ac.in](mailto:apurba@hyderabad.bits-pilani.ac.in)).