

1. **FIFOs:** You are given the database which you are familiar with last lab session. Consider any *one* list of registered students in a course (say file database/CS/cs101.txt). This file is sorted according to students roll number in the increasing order. Assuming that all the records of this file are already written on to a FIFO, your task is to *sort* the records in decreasing order in the **same** FIFO.

Note: 1. In the process of implementation, you can use any number of intermediate PIPEs/FIFOs.

Note: 2. Do not use additional memory/data structures.

Note: 3. You should implement this program either in **C** or **C++** language only.

Note: 4. Material shared in sections 44.1, 44.2, 44.7 and 44.8 help in this assignment.

Testing methodology: Once you have sorted the records into the FIFO, TA will open a terminal and at the command prompt he will cat the file on to standard output which should display contents of in reverse order of the records.

| Evaluation Point | Description | Marks |
|------------------|------------------------------------|-------|
| 1 | Reading file contents | 1 |
| 2 | Creating FIFO and placing contents | 1 |
| 3 | Use of intermediate PIPEs or FIFOs | 3 |
| 4 | Output | 1 |
| 5 | Logic | 4 |