

## Implementation of Heap File Organization Lab

We assume that you have implemented the practice lab assignment.

You have to change the record insertion strategy as follows:

- While selecting a page to insert a new record, prefer a page that has highest amount of free space. Intuition here is to keep all pages almost equally filled.
- Within each page keep records sorted in the ascending order using the primary key value. Intuition here is to perform faster search within each page. Within a given page, record with the smallest value for primary key should be in the directory slot number zero. You might have to shift records within a page to maintain the sorted order. As a result, the assigned slot number for the record might change.

Rest of the specification remains identical to the practice assignment.

**Note: If you have not properly submitted the practice lab assignment, then you will get zero marks in this lab.**

Note on code submission:

Make sure that all your code fits into a single file <roll number>HeapFLab.cpp

How your code should compile?

```
g++ <roll number>HeapFLab.cpp
```

How your code should run?

```
a.out < input_file_name
```

Your code should write the output on the stdout