AOS Assignment – Filesystems

Our implementation of Filesystems includes creation of following files:

1. fs.c :
   This file includes all functions for file system implementation. The functions are as follows:
   1. fs_seek():
      This function checks if file pointer runs past the end of the file size.

   2. fs_write():
      This function is used for writing data into the file.

   3. fs_read():
      This function is for reading the file contents.

   4. fs_close():
      This function is used for closing the file.

   5. fs_open():
      This function is called to open the file.

   6. fs_create():
      This function is used to create the file.

2. fs.h :
   This is the header file of our filesystem implementation.

3. xsh_fstest.c :
   This is the file for our shell command – fstest
   We need to send filename as an argument to demonstrate the filesystem implementation.
   We get an error in case we try to provide the same filename to the command again since our current implementation does not support file delete functionality.

The current size of the file is set to 2000 bytes and output correctly shows 4 data blocks are being used.

Lessons Learned from this project:

We could learn about filesystem, implemention of fs_open, fs_read, fs_write, fs_seek, fs_close, inodes, and other filesystem related functionalities

All tasks have been done by us collaboratively.