# University of Texas at Dallas--Computer Science Program
# CS 5348 Operating Systems Concepts Fall 2019
# Project 3

V6 file system is highly restrictive. A modification has been done: Block size is 1024 Bytes, i-node size is 64 Bytes and i-node's structure has been modified as well.

The following command has been implemented as well and the code for that is available for you to use (and start from):

$ initfs fname n1 n2
fname is the name of the (external) file in your Unix machine that represents the V6 file system.

n1 is the number of blocks in the disk (fsize) and n2 is the total number of i-nodes.
This command initializes the file system. All data blocks are in the free list (except for one data blosk that is allocated to the root /. An example is: initfs /user/venky/disk 8000 300

You need to implement the following commands:

**(a) cpin externalfile v6-file**

Creat a new file called v6-file in the v6 file system and fill the contents of the newly created file with the contents of the externalfile.

**(b) cpout v6-file externalfile**

If the v6-file exists, create externalfile and make the externalfile's contents equal to v6-file.

**(c) mkdir v6-dir**

If v6-dir does not exist, create the directory and set its first two entries . and ..

**(d) rm v6-file**

If v6-file exists, delete the file, free the i-node, remove the file name from the (parent) directory that has this file and add all data blocks of this file to the free list

**(e) ls**

List the contents of the current directory.

**(f) pwd**

List the fill pathname of the current directory

**(g) cd dirname**

change current (working) directory to the dirname

**(h) rmdir dir**

Remove the directory specified (dir, in this case).

**(i) open filename**

Open the external file filename, which has a v6 filesystem installed.

(j) q

Save all changes and quit.

Keep in mind that all file names not starting with / are absolute path names and those not starting with / are relative to current working directory.

Due date: November 26, 2019 11:55 pm.