

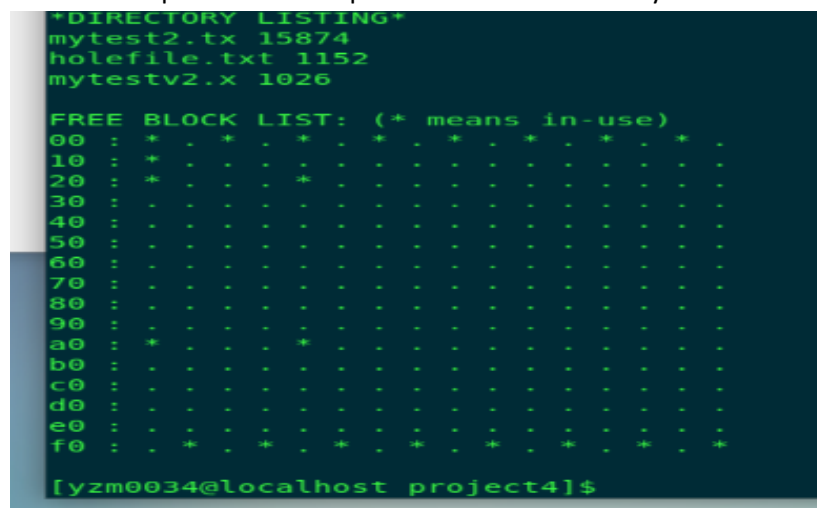
Project 4

1) Design cpmFs:

The objective of the project was to create a file system that can perform read and write operation on the file. The implementation of file system starts with the creation of a disk of size 256 blocks which contains 1024 bytes each. The Block 0 reserved for the Directory which consists of 32 bytes extents. The first bytes is a binary bytes which verify the existence of extent. Followed by next eight bytes is reserved for file name which is followed by additional 3 bytes that hold the file extension. And renaming blocks hold the data.

In this project, to create a file system several steps were followed. First, step was to read the file and gather the file information using file system and so on.

Here is a snap shot of the implementation of the file system.



```
*DIRECTORY LISTING*
mytest2.tx 15874
holefile.txt 1152
mytestv2.x 1026

FREE BLOCK LIST: (* means in-use)
00 : * . * . * . * . * . * . * .
10 : * . . . . . . . . . . . .
20 : * . . . * . . . . . . . .
30 : . . . . . . . . . . . .
40 : . . . . . . . . . . . .
50 : . . . . . . . . . . . .
60 : . . . . . . . . . . . .
70 : . . . . . . . . . . . .
80 : . . . . . . . . . . . .
90 : . . . . . . . . . . . .
a0 : * . . . * . . . . . . . .
b0 : . . . . . . . . . . . .
c0 : . . . . . . . . . . . .
d0 : . . . . . . . . . . . .
e0 : . . . . . . . . . . . .
f0 : . * . * . * . * . * . * .

[yzm0034@localhost project4]$
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2) Lesson Learned:

- 1) I gain a lot experience in coding in C, since C is not my primary coding language I lost my skills in C which I recovered with this course.
- 2) I get to know about the basic working of file system and functionality of directory in the system.
- 3) I also learned the use of image file in the file system.