Test Scenarios (each 25 points)

Test 1:

- An empty disk of size 2MB is made.
- It is formatted.
- It is mounted.
- File0 of size 1.5MB is created (fill with anything)
- Create file1 of size 1MB: not enough disk space, at a time we should have file write error and file1 will be created partially (size of file1 should be approximately 0.5M)
- Delete incomplete file1.
- Truncate file0 to 0.5MB
- File1 of size 1MB is created: no error this time

Test 2 :

- A disk of size 2MB with multiple files inside is created and mounted.
- One of existing files is deleted. A new file of size 1 byte is created. Another file of size Blocksize+1Byte is created (new files are filled with 0).
- Disk is unmounted.
- Dis is mounted back again.
- Deleted file shouldn't exist and new files should exist with one and two allocated blocks respectively.

Test 3:

- An empty and formatted disk of size 2MB is available.
- It is mounted.
- File0 up to file6 of size 256KB are created (all 7 files filled with any value) in exactly specified order.
- File0, file6, file2 and file4, are deleted in exactly specified order.
- File7 and file8 of size 0.5MB are created. (will be fragmented).

Test 4:

- A disk of size 2MB is available with file1 and file2 inside.
- File0 keeps even unsigned integers [0,2,4,…,2^17-2], file1 keeps odd unsigned integers (1,3,5,7,… 2^17-1).
- Both are combined together to file3 in correct ascending order (0,1,2,3,4,…, 2^17-1). File1 & file2 are read and file3 is written.