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**myMemory System Call Testing**

**Test 1**

A screenshot of a computer screen

Description generated with very high confidence

Tests the base page counts for the test program. Only myMemory() is called.

**Test 2**

A screenshot of a computer screen

Description generated with very high confidence

Tests **the page counter by allocating 4096 bytes (size of a single page). Here (and for all tests) the kernel counters also increment because the kernel can access to the newly allocated pages as well.**

**Test 3**

A screenshot of a computer screen

Description generated with very high confidence

Tests **page counter by allocating 4097 bytes (size of a single page and one extra byte)**

**Test 4**

A screenshot of a computer screen

Description generated with very high confidence

Tests page counter by allocating 1024 bytes twice and ensuring only a single page gets allocated.

**Test 5**

A screenshot of a computer screen

Description generated with very high confidence

Tests page counter by allocating pages in succession and ensuring each allocated page is writable.

**Test 6**

A screenshot of a computer screen

Description generated with very high confidence

Stress tests page counter by allocating pages until no more can be allocated to ensure only actual allocated pages are counted.

**Test 7**

A screenshot of a computer screen

Description generated with very high confidence

Tests page counter by allocating pages then deallocating them and ensures the counter accurately decrements.

**Test 8**

A screenshot of a computer screen

Description generated with very high confidence

Tests page counter by allocating and subsequently deallocating pages and ensures no additional pages (often a problem caused by thrashing) get counted.

**Test 9**

A screenshot of a computer screen

Description generated with very high confidence

Tests page counter of a child process (which has a copy of the parent process’s page table) and ensures both counts are the same.

**Test 10**

A screenshot of a computer screen

Description generated with very high confidence

Tests page counter of an exec’ed process (which gets a new page table) and ensures no pages are copied from the original process.

**Test 11**

A screenshot of a computer screen

Description generated with very high confidence

Tests page counter of different sized program for the text/data pages and sees if those pages get counted accordingly.