**DOCUMENTATION**

**File name:** system.mac

**Purpose**: make system calls easier, with write, read and exit macros

**Macro name:** write

**Parameters:** %1-file descriptor, %2-pointer to string, %3-number of characters to write

**Result:** rax-number of characters written or standard error message

**Dependencies:** system call #1, legal file descriptor

**Limitations:** None

**Macro name:** read

**Parameters:** %1-file descriptor, %2-pointer to buffer to store input, %3-size of buffer

**Result:** rax-number of characters read or standard error message, input string stored in buffer

**Dependencies:** system call #0, legal file descriptor

**Limitations:** None

**Macro name:** exit

**Parameters:** %1-exit status code

**Result:** exits program, passing status code to OS

**Dependencies:** system call #60

**Limitations:** None

**Macro name:** open

**Parameters:** %1-address of file name, %2-file descriptor

**Result:** opens file

**Dependencies:** SYS\_creat, legal file descriptor

**Limitations:** None

**Macro name:** close

**Parameters:** %1-file descriptor

**Result:** closes file

**Dependencies:** system call #3, legal file descriptor

**Limitations:** None

**Macro name:** read\_file

**Parameters:** %1-pointer to filename, %2-file descriptor, %3-pointer to buffer, %4-size of buffer

**Result:** all characters of a file printed to the console

**Dependencies:** system calls #0, 1, 2, legal file descriptor

**Limitations:** None