

**MINF18**  
**TD OS Reporting**  
**Devoir 1**  
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1.

**What is the reasonably expected output considering #if 0 transformed to #if 1? We will not activate the code at first, so that it can compile until we have implemented it.**

**Answer:**

Only the first block will be processed until someone changes the 1 to a 0. Then the other block will be compiled. This is a convenient way to temporary switch blocks of code in and out while testing different algorithms.

**Explain why it is a mistake to try:**

**+ to read a character before being warned that a character is available**

because Write "ch" to the console display,  
and return immediately. "writeDone"  
is called when the I/O completes.

**+ to try to write before being warned that the previous writing is complete.**

because the previous writing must be complete then "writeDone" is called when the I/O completes so to try to write before the error will be occur.

**5.2: The number of characters written must be returned. Beware of the int \*value argument of ReadMem: why can not we just pass a pointer pointing inside the buffer to?**

**Answer:**

**because** A pointer is a variable that stores a memory address. Pointers are used to store the addresses of other variables or memory items. Pointers are very useful for another type of parameter passing, usually referred to as **Pass By Address**. Pointers are essential for dynamic memory allocation.

**The choice of the file in which write this function is yours, several places are appropriate. You must motivate your choice in the report:**

**Define** int c opyS trin gFrom Mach ine ( int from , char \* to , unsigned size ) in  
synchconsole.h: `int copyStringFromMachine(int from , char * to , unsigned size);`  
implement this method in `SynchConsole.cc`  
 `//(5.2) Write a procedure similar to strcpy:`

```

void SynchConsole::copyStringFromMachine (int from, char *to,
unsigned size) {
    unsigned i;
    for(i=0;i<size && machine->mainMemory[from+i] !='\
0';i++) {
        to[i] = machine->mainMemory[from+i];
    }
    to[i] = '\0';
}

```

Why would not it be reasonable to allocate, to a buffer, the same size than the MIPS string? Depending on how you allocated the buffer, make sure that the buffer is released after the system call is complete

**Answer:**