CSE 40373 - Handout - Lecture 02 - 01-18-24

What does a process look like?	What does the stack look like?

Memory Map / Pointers

$1000	0xA4
$1001	0xB5
$1002	0xC6
$1003	0xD7
$1004	0xE8
$1005	0xF9
$1006	0x0A
$1007	0x1B
$1008	0x2C
$1009	0x3D
$100A	0x4E
$100B	0x5F

```
char *    pByte  = (char * ) 0x1004;
short *   pShort = (short *) 0x1002;
int *     pInt   = (int *) 0x1008;
```

```
pByte[0]                          *(pByte+2) ^ 0xFF

pByte+2                           sizeof(pInt)

*(pShort-1)                       sizeof(pShort)

pShort+2                          sizeof(pByte+1)

pInt[-1]                          sizeof(&pInt)
```

Suppose we need to turn on an interrupt for a device. The control register is at memory address $A6720436 and is 8 bits. The interrupt enable bit is bit 3. Turn that bit on.

Suppose we have a device whose status register is 8 bits and is located at memory address 0x1040000A. The device is in trouble if both bits 6 and 5 are set to 1. Write an expression to check and see if both bits are on for the device.

Retrieve the content from the following URL using Python:

http://ns-mn1.cse.nd.edu/sysprogfa23/assignment08/test/data-switch.json