#1. What are the two main types of cache write policies we discussed in class?

_____________________ _____________________

Which of these is more efficient for lots of temporary intermediate value writes that are not needed to be saved?

_____________________

What keyword tells the compiler to turn off any and all types of optimizations associated with the variable to which this keyword is specified?

_____________________

#2. What is the default buffering for

stderr _________________ file I/O_________________

stdout _________________ stdin_________________

#3. This type of I/O uses special instructions and port names to perform I/O and not regular instructions.

___________________________________

The __________ translates ______________ to physical addresses.

The ____________ caches these recently translated addresses.

#4. The keyword static in C is used for two different purposes. What are the two meanings of static in C?

1)

2)

(over)
#5. Given the following program, reorder the printf lines so that the values that are printed are sorted from smallest to largest if compiled and run on a Sun SPARC architecture. These lines print out the address of the different parts of the program (not the values assigned).

```c
int c = 420;

int main( int argc, char *argv[] ) {
    int a = 420420;
    static int b;
    /* 1 */ (void) printf( "1: a --> 0x%08p\n", &a );
    /* 2 */ (void) printf( "2: b --> 0x%08p\n", &b );
    /* 3 */ (void) printf( "3: c --> 0x%08p\n", &c );
    /* 4 */ (void) printf( "4: argc --> 0x%08p\n", &argc );
    /* 5 */ (void) printf( "5: main --> 0x%08p\n", main );
    /* 6 */ (void) printf( "6: malloc --> 0x%08p\n", malloc(50) );
}
```

This line number would print the smallest value (low memory)

This line number would print the largest value (high memory)

What question would you most like to see on the Final Exam?