CSE 332 Sample Exam Questions

Questions asked on the midterm exam will be similar in style to the following questions though the content of the questions is likely to differ in the exam itself:

1. (10 points) For each of the following code fragments, please write the letter of the phrase that best describes it next to it.

a. n is initialized with the value 7	___ `int fnc(int n);`
b. n is assigned the value 7	___ `int n[7];`
c. n is an array of integers	___ `int const * n;`
d. n is an array of pointers to integers	___ `int fnc(int & n);`
e. n a pointer to a const integer	___ `n = 7;`
f. n is a const pointer to integer	___ `int * n[7];`
g. n is a reference to integer	___ `int fnc(int * n);`
h. n is an integer passed by value	___ `int * const n;`
i. n is an integer passed by reference	___ `int n = 7;`
j. n is an integer pointer passed by value	___ `int & n = p;`

2. (5 points) Please write each of the following words into their correct places in the following sentences: (a) linker, (b) compiler, (c) editor, (d) Makefile, and (e) precompiler.

The _____ copies the content of header files into the source files, which you created using an _____. The _____ turns those source files into object files that are then combined by the _____ to form an executable program. On Linux these steps are managed by inference rules from the _____ that invoke each step as needed.

3. (8 points) Please explain briefly (1) what is wrong with the following function and (2) what you would do to fix it:

```
// exchanges values of passed variables
void swap_integers (int i, int j)
{
int temp = i;
i = j;
j = temp;
}
```

4. (4 points) Please describe briefly one important similarity between C style strings and C++ style strings:

Please explain one important difference between C style strings and C++ style strings:

5. (6 points) Please explain briefly (1) what is the output of the following program and (2) what does that say about the order in which elements are stored in a set container?

```
#include <iostream>
#include <algorithm>
#include <iterator>
#include <set>
using namespace std;

int main (int, char * []) {

  set<string> s;
  s.insert(string("sample"));
  s.insert(string("midterm"));
  s.insert(string("question"));

  copy (s.begin(), s.end(),
        ostream_iterator<string>(cout,
                                 " "));
  cout << endl;

  return 0;
}
```