Hanly and Koffman, 5ed, Chapters 2-5, Closed book and closed notes.

1. (10 points) You just printed something, and realize that it is a binary file that will print a bunch of garbage. What are the steps you take to cancel the print job?

2. (5 points) What UNIX command would you type to see a list of all of the files (including the hidden files) in directory hw1?

3. (5 points) You just wrote and saved the file test2.c. Now you want to make sure that only you can read and write it. What UNIX command would you type to make test.c only readable and writeable by you?

4. (5 points) You want to move all of your C source files (ending in .c) and header files (ending in .h) from your hw1 subdirectory to your mid1 subdirectory. What UNIX command should you type?

5. (5 points) You want to view the file test3.c a screen at a time. What UNIX command would you type?

6. (25 points) Given the following series of if statements, provide the outputs for each X. Note that more than one printf can be executed for each X.

```
if (X > 20)
 printf("First ");
else
 if(X < 5)
    printf("Second ");
    else
      printf("Third ");
 if(X == 20)
    printf("Fourth ");
 else
    if(X < 19 || X > 25)
      printf("Fifth ");
 if(X > 5 && X < 22)
    printf("Sixth ");
```

a. (5 points) X = 0 _____

b. (5 points) X = 5 _____

c. (5 points) X = 17 _____

d. (5 points) X = 20 _____

e. (5 points) X = 28 _____

7.   (15 points) Write a *for* loop that will produce the same output as the following while loop.
```
int x = 7;
while(x < 20)
{
   x = x + 3;
   printf("%d", x);
}
```

8. (20 points)Assuming that x is 11, y is 6, and z is 1 at the beginning of each statement, what is the value of w:

a.) w = (x != y) -2 + 7   _____

b.) w = x-- + y-- * ++z   _____

c.) w = x == y || x != y && z > x   _____

d.) w = !!(x * 4) + x % y   _____

e.) w = 7 * --y + !(y ==5)   _____

9. (50 points) Write a complete, warning-free, C program that lists all of the common factors of two positive integers. The program will prompt the user for the two numbers, and then list on one line all the factors that the numbers have in common. A factor of a number divides into that number with a remainder of zero. The program will continue to ask the user for more pairs of numbers until the first number entered is zero. Your prompts and formats should match that shown. User input is in **bold.**

```
Please enter two positive integers: 20 12
1 2 4

Please enter two positive integers: 60 120
1 2 3 4 5 6 10 12 15 20 30 60

Please enter two positive integers: 8 9
1

Please enter two positive integers: 0 230
Done.
```