Big Quiz 1
Section 0104

Time Allotted: 50 minutes
Total Points: 100

Name: _______________________
Glue Login: _______________________

NOTE: Please read the instructions carefully before you begin.

Instructions
1. This quiz is closed book, closed notes, closed calculators and closed neighbors.
2. All the code given here is error free.
3. Put all your answers on the spaces provided for each answer.
4. If you need more space, you can use the back of the sheet.
5. You are NOT supposed to submit anything electronically. Anything submitted electronically will not be graded.
6. Do not start the quiz until told to do so.
Q1 (20 points). Given the following piece of code, what is the output of each of the `printf`'s?

```c
#include <stdio.h>

int main()
{
    int x = 5, y = 10;
    float z = 20.0;

    printf ("%d \n", (int) / x + z); i) ________ 22 __________
    printf ("%d \n", (int)x *+ a); ii) ________ Error ________
    printf ("%d \n", (int)z / ++y); iii) ___1, 1.8___________
    printf ("%d \n", (int)y % x * z); iv) _______20____-2 for 0
    return 0;
}
```

Q2 (20 points). Consider the following piece of code:

```c
if (a >= 0)
    printf("a is greater than or equal to 0.\n");
if (a > 10)
    printf("a is greater than 10.\n");
else
    printf("default.\n");
```

What would be the output of this piece of code if before the first if statement, the value of the variable `a` was:

i) 20 Output: _a is greater than or equal to 0
        _a is greater than 10____________________

ii) 0 Output: _a is greater than or equal to 0._____
            _default____________________________

iii) -20 Output: _default____________________________
                      ____________________________

Q3 (20 points). Given the following variable declarations, specify the value of the expressions as TRUE (1) or FALSE (0). The first one is already done for you as an example.

```
int a = 5;
int b = 10;
int c = 0;
```

Hint: `& &` is the AND operator, `| |` is the OR operator and `!` is the NOT operator.
int a = -1, b = 5;

i) ( b )
   value: TRUE

ii) ( 0 || 1 )
    value: TRUE

iii) (!0 )
     value: TRUE

iv) ( 0 && a )
    value: FALSE

v) ( a > b && b )
   value: FALSE

vi) ( b && a )
    value: TRUE

Q4 (40 points). Write a complete program that asks the user to enter any 3 integers and prints them out in decreasing sorted order.

Sample output when this program is run:

Enter any three integers: <suppose the user enters –1 10 3>
The numbers you entered in sorted order: 10 3 -1