

Name:

Id#

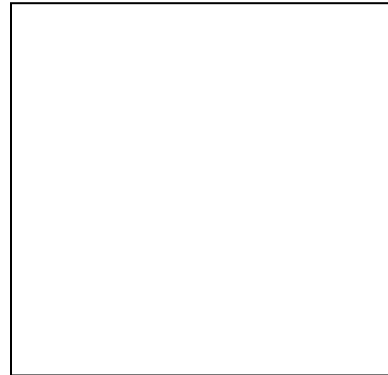
ICS 103, Term 103
Computer Programming in C
Quiz# 2

Date: Tuesday, July 19, 2011

Q1. Determine the output of the following program:

```
#include <stdio.h>
int main (void) {

    int j, k=1;
    do {
        for(j=0; j < abs(3-k); j++)
            printf("*");
        printf("%d\n", j);
        k++;
    } while (k <= 5);
    return 0;
}
```



Q2. Rewrite the following shaded part using **do while loop** instead of while loop:

```
#include <stdio.h>
int main(void) {
    int i;
    printf("Enter a number: ");
    scanf("%d", &i);
    while (i<0 || i>100){
        printf("Enter a number: ");
        scanf("%d", &i);
    }
    return 0;
}
```



Q3. Write a program that finds the equivalent series and parallel resistance for a collection of resistor values. Your program should compute the equivalent series and parallel resistances for all resistors in the collection correct up to two decimal places. Use any **non-positive** value to indicate the end of the program data. Note that the series resistance is computed as $R_s=R_1+R_2+R_3+\dots$, while the parallel resistance is computed as $R_p=1/(1/R_1+ 1/R_2+1/R_3+\dots)$.

Sample executions of the program are shown below:

```
Enter a collection of resistor values:  
1 2 3 0  
Series resistance is 6.00  
Parallel resistance is 0.55  
Press any key to continue . . .
```

```
Enter a collection of resistor values:  
10 20 -1  
Series resistance is 30.00  
Parallel resistance is 6.67  
Press any key to continue . . . _
```