Name: Id#

ICS 103, Term 093

Computer Programming in C

Quiz# 2

Date: Tuesday, July 27, 2010

Q1. Determine the output of the following program:

```
#include <stdio.h>
int main(void) {
int i, j;
for (i=5;i>=1; i--) {
  for (j=i;j>=1; j--)
    printf("%d",j);
  printf("\n");
}
return 0;
}
```

Q2. Rewrite the following shaded part using **for 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 asks the user to enter a positive number, n, and display s(n) computed as follows: $s(n) = \frac{1}{3} + \frac{1}{7} + \frac{1}{11} + \dots + \frac{1}{4n+3}$. Note that $s(0) = \frac{1}{3}$ and $s(1) = \frac{1}{3} + \frac{1}{7}$. The user should be asked to renter the input if a negative value is entered. A sample execution of the program is given below:

```
Enter a positive number: -1
Enter a positive number: 3
s(3) = 1/3 + 1/7 + 1/11 + 1/15 = 0.63
Press any key to continue . . .
```