Name: **Id#**

ICS 103, Term 103

Computer Programming in C
Quiz# 4

Date: Sunday, August 14, 2011

Q1. Determine the output of each of the following programs:

```c
#include <stdio.h>
#include <string.h>
#include <ctype.h>
int main() {
  char str1[]={"ICS 103 is Interesting"};
  char *t;
  int count=0;
  t = strtok(str1, " ");
  while ( t != NULL ) {
     if (tolower(t[0])=='i'){
         puts(t);
         count++;
     }
     t = strtok(NULL, " ");
  }
  printf("%d\n", count);
  return 0;
}
```

```c
#include <stdio.h>
int main(void)
{ int A[6] = {11,12,19,27,33,42};
  int i, count=0;
  for (i=0; i < 6;i++)
    if ((A[i] % 3)==0) {
       printf("%d ", A[i]);
       if ((A[i] % 6)==0)
           continue;
       count++;
    }
  printf("\n%d", count);
  return 0;
}
```

```c
#include <stdio.h>
#include <string.h>

int main(void) {
    char str[4][80]={"ICS", "SWE", "SE",
"COE"};
    char tstr[80];
    int i, p=1, s;
    do{
      s = 0;
      for(i = 1; i <= 4-p; i++) {
         if (strcmp(str[i-1],str[i])<0){
             strcpy(tstr,str[i-1]);
             strcpy(str[i-1],str[i]);
             strcpy(str[i],tstr);
             s=1;
         }
      }
      p++;
      for (i=0; i<4; i++)
         puts(str[i]);
    } while (s==1 && p <= 3);
    return 0;
}
```

```c
//show the values of matrix A resulting from
//executing the program shown below
#include <stdio.h>
int main (void){
int A[3][4],i,j;
for(i=0; i < 3; i++)
  for(j=0; j < 4; j++)
    if (i < 1)
       A[i][j] = j+2;
    else
       A[i][j] = A[i-1][j]*j;
return 0;
}
```