1(a)
```c
#include <stdio.h>
int goo
void towers (int, char, char, char);
int main()
{
  int num ()
{
  int num;
  print("Enter the number of disks : ");
  scanf ("%d", &num);
  print ("The sequence of moves involved in the tower of Hanoi are
        :\n");
  towers(num, 'A', 'C', 'B');
  return 0;
}
void towers (int num, char frompeg , char topeg, char auxpeg)
{
  if (num == 1)
{
  printf ("\n Move disk 1 from peg %c to peg %c", frompeg, topeg);
  return;
}
  tower(num -1, frompeg , auxpeg , topeg);
  printf ("\n Move disk %d from peg %c to peg %c", num, frompeg,
    topeg);
  tower (num -1, auxpeg, topeg, frompeg);
}
```

```c
(a) #include <stdio.h>
   int gcd (int, int);
   int main ()
   {
    int n1, n2, num;
    printf ("Enter two positive integers :");
    scanf ("%d %d", &n1, &n2);
    printf ("G.C.D of %d and %d is %d", n1, n2, gcd (n1, n2));
    return 0;
    system (" pause ");
   }
   int gcd (int n1, int n2)
   {
    if (n2 != 0)
     return gcd (n2, n1 % n2);
    else
    return n1;
   }
```

Modification

```c
static int count (int n, char s, char d, char a)
{
 int count = 0;
 if (n == 0)
 return 1;
count += count (n-1, s, a, d)
count += count (n-1, a, d, s)
 return count;
  }
```