CSE 110

Online Problems for C Language: Loop

Subsection: C2

Time: 45 Minutes **Full Marks: 20**

1. An Armstrong number is a number which is equal to the sum of digits raised to the power of total number of digits in the number. For example, an Armstrong number of three digits is an integer such that the sum of the cubes of its digits is equal to the number itself. 371 is an Armstrong number since $3^3 + 7^3 + 1^3 = 371$. Write a program to print the Armstrong numbers for *n*-digit numbers. The program takes an integer *n* as input. It outputs the Armstrong numbers, and also the total count for *n*-digit numbers. If there are no such numbers for *n*-digit numbers, print "None" [Marks: 10]

Sample Input	**Corresponding Output**
2	None
3	153 370 371 407 Count = 4

2. Write a program that takes an integer decimal number (which will always be positive) as input and prints the binary equivalent of that number. Note that, you cannot use array/pointer to solve this problem. [Marks: 10]

Sample Input	**Corresponding Output**
1	1
6	110
10	1010