Assignment Lec (5)

(1) Write a C Function that prints the cube of any number

(2) Write a C Function that returns the addition or subtraction or multiplication or division for two numbers. The function should take the required operation and two numbers as arguments. It also should check that the input operation is one of those operation that mentioned before and if not it should return error. The function should be implemented using switch case.

(3) write a C Function that display Prime Numbers between Intervals (two numbers).

(4) You are designing a poster which prints out numbers with a unique style applied to each of them. The styling is based on the number of closed paths or holes present in a giver number. The number of holes that each of the digits from 0 to 9 have are equal to the number of closed paths in the digit. Their values are:

- 1, 2, 3, 5 and 7 = 0 holes.
- 0, 4, 6, and 9 = 1 hole.
- 8 = 2 holes.

Given a number, you must determine the sum of the number of holes for all of its digits. For example, the number 819 has 3 holes.
Make the function countHoles. The function must return an integer denoting the total number of holes in num.

(5) Write a C function that returns 1 if the input number is a power of 2 and return 0 if the input number is power of 3, otherwise it shall return -1.

(6) Write a C Function to count the number of ones in the binary representation of a 32-bit integer.

(7) Write a C Function that returns the maximum number of Zeros between two ones in the number binary.

Example:

Input binary = 10110010001010000011100010000110

Output = 5