



North South University

Department of Electrical and Computer Engineering  
**CSE 373: Design and Analysis of Algorithms**

Fall 2019

Assignment 02

### Problem description:

The function *AweSum* is defined as:

$AweSum(0, n) = n$ , for all positive  $n$ .

$AweSum(k, n) = AweSum(k - 1, 1) + AweSum(k - 1, 2) + \dots + AweSum(k - 1, n)$ , for all positive  $k, n$ .

In this problem, you are given the values of  $k$  and  $n$ , and your task is to write a **C program** to determine the value returned by *AweSum*( $k, n$ ).

### Input specification:

The input consists of a pair of positive integers, representing  $k$  and  $n$ , respectively, where  $1 \leq k \leq 35$  and  $1 \leq n \leq 32$ .

### Output specification:

The output of your program is a single integer, representing the value returned by *AweSum*( $k, n$ ). Your program must not print any extra text whatsoever.

Sample input:	Sample output:
1 3	6
2 3	10
4 10	2002
10 10	167960

### Submission instructions:

Please read carefully the following instructions on how to submit your assignment. If you make any mistake at all in the submission process, your assignment will not be marked.

Suppose your NSU student ID is 1234567890. After you complete the assignment, **rename** your source file (let's say `main.c` for example) as "1234567890.c" and upload this file on Google Classroom in assignment section. Do not send assignments as message attachment. Do not upload any additional file.

**Any form of cheating will be penalized heavily. Duplicate codes (no matter if full or partial) will not be marked regardless of which one the original is.**