BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY
Department of Computer Science and Engineering
July 2023 CSE 316 Offline Assignment on
Assembly Language Programming

Problem 1: Sahil has a supply of n chocolates. He eats them one by one, keeping all the wrappers. If he gathers k > 1 wrappers, he can exchange them for a new chocolate. How many chocolates can Sahil have in total?

You should take two integer numbers separated by space giving the values of n (0<n<65535) and k (0<k<n<65535) as you input.

Provided below are examples of sample input and the corresponding output:

Input	Output
4 3	5
10 3	14
100 5	124

Problem 2: Given an integer n (0<n<65535), you need to find the sum of its digits. Remember you must use recursion to calculate the digit sum.

You should take an integer number separated by space giving the values of n as your input

Input	Output
143	8
5054	14
221	5

Academic Integrity Statement: While collaborative discussions and seeking assistance from teachers and peers are encouraged, copying code from any external source is strictly prohibited. Any instance of code plagiarism, if detected, will result in receiving a full 100% negative mark.

Submission Deadline: 01:59 AM, December 17, 2023