

**AMERICAN INTERNATIONAL UNIVERSITY BANGLADESH
FACULTY OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF COMPUTER SCIENCE**

SWITCH:

1. Take two integer and make the following menu
 1. addition
 2. subtraction
 3. Multiplication.
 4. division.

Now take the user choice i.e. 1, 2 etc and print the result.

Loop:

1. Print your name 100 times in the screen each in a new line.
2. Print from 1 to 10 on the screen.
3. $1+2+3+\dots+n=?$ Take n as an input integer.

Sample Input	Sample Output
Enter an integer number: 3	Output: 6
Enter an integer number: 5	Output: 15

4. $1+3+5+\dots=?$ Take n as an input integer where n means the number of terms in the series.

Sample Input	Sample Output
Enter an integer number: 3	Output: 9
Enter an integer number: 4	Output: 16

5. Take an integer input n and find out the sum of individual digit.

Sample Input	Sample Output
Enter an integer: 123	Output: 6
Enter an integer: 234	Output: 9

6. Take an integer input and print it's all factors .

Sample Input	Sample Output
Enter an integer: 20	Factors are: 1 2 4 5 10 20
Enter an integer: 50	Factors are: 1 2 5 10 25 50

7. Take an input and check whether it is perfect number or not.

A perfect number is a positive integer that is equal to the sum of its positive divisors, that is, the sum of its positive divisors excluding the number itself. Example: the divisors of 6 are 1,2,3 and $1+2+3=6$, thus 6 is a perfect number.

The divisors of 8 are 1,2,4 and $1+2+4=7$, which is not equal to 8, thus 8 is not a perfect number.

8. Write a program to input two integer numbers and display the sum of even numbers between these two input numbers. For example: even numbers between 2 and 11 are 4,6,8,10.

Sample Input	Sample Output
Enter an integer: 2 Enter an integer: 11	Output: 28

9. Print the following pattern.

Sample Input	Sample Output
Enter an integer number: 5	1 12 123 1234 12345

10. Print the following pattern.

Sample Input	Sample Output
Enter an integer number: 5	* ** *** **** *****