CS-200: Programming I
Fall 2017
Northeastern Illinois University
PLTL: Week of 08/28/17
Intro to Programming

Practice Tracing

Given the following variable declarations, what is the value of each of the following independent expressions?

```
int a = 2, b = 7, m = 6, n = 3, o = 14 ;
double d = 2.0;
String c = "Fall";
```

- `a + b - m + n`
- `n - a + "" + ( o - b )`
- `c + d + ( b - m ) + ( o - b )`
- `a * b % a + m / n`
- `b / a + c + m % n`

Practice coding

- Write a program that has the class name `SumSpaced` and has the `main` method.
- The program asks the user to enter non-negative integer n which is from 1 to 140 (inclusive) and prints the sum of the numbers from 1 to n broken into the sequence of individual digits.
- The sum of n integer can be calculated by the formula below:

$$\frac{n\,(\,n+1\,)}{2}$$

- You can only divide using 10 for breaking the sum into individual digit.
- Several sample runs are provided for you below. Format your output to match the sample output. Note that your code should work for any value and these are just samples (you cannot hard-code your values in your code).

```
Enter n: 10
The sum of first 10 numbers is 55
The sum seperated by space is: 0 0 5 5
```

```
Enter n: 23
The sum of first 23 numbers is 276
The sum seperated by space is: 0 2 7 6
```

```
Enter n: 140
The sum of first 140 numbers is 9870
The sum seperated by space is: 9 8 7 0
```