Practice Problem

- Write a code to sum the first *n* digits (1+2+3+...+n)

- Ask the user to provide the value for n

- Calculate the sum for the n that was provided (use for loop)

- Print the final sum

Submit .cpp file called
"Mena_Time_CForloopTeam#"
("Mena_10am_CForloopL01") into Classwork folder

```c
#include <stdio.h>
#include <stdlib.h>

int main(void)
{
    //Declare variables
    int n, the_sum, i;

    //Ask user to provide n
    printf("What value of n would you like?");
    scanf("%d", &n);

    //Initialize sum variable
    the_sum = 0;

    //For loop to calculate sum
    for (i = 1; i<=n; i = i + 1)
    {
        the_sum=the_sum+i;
    }

    printf("The sum is %d", the_sum);


}
```

Practice Problem

- Write a program asking the user to enter elements of a 2x2 matrix A

- Then display the elements (2 decimal places) as shown in the output

- Use for loops to get the inputs and then to print the values

```
Please enter the elements of Matrix a
Enter element in ROW=1, COL=1: 1
Enter element in ROW=1, COL=2: 2
Enter element in ROW=2, COL=1: 3
Enter element in ROW=2, COL=2: 4
----------------------------------------
You have entered the following elements for Matrix a:
1.00
2.00
3.00
4.00
Press any key to continue . . .
```

Submit .cpp file called "Mena_Time_CMoreLoopsTeam#"
("Mena_10am_CMoreLoopsL01") into Classwork folder

```c
#include <stdio.h>
#include <stdlib.h>

int main(void)
{
    int i, j;
    double a[2][2];

    //Get inputs from user
    printf("\n\nPlease enter the elements of Matrix a\n");
    for (i = 0; i<2; i = i + 1)
    {
        for (j = 0; j<2; j = j + 1)
        {
            printf("Enter element in ROW=%d, COL=%d: ", i + 1, j + 1);
            scanf("%lf", &a[i][j]);

        }
    }

    //Print values

    printf("-------------------------------------");

    printf("\nYou have entered the following elements for Matrix a:\n");
    for (i = 0; i<2; i = i + 1)
    {
        for (j = 0; j<2; j = j + 1)
        {
            printf("%.2lf\n", a[i][j]);
        }
    }
}
```