# Programming – TU857/1

## Lab 11 – Thursday, February 1st, 2024

**Note:** You are expected to finish all programs in your own time if you do not get these done during the lab session. This is your own responsibility.

## Functions (part 1)

**Remember:** Use Symbolic names in your programs. Do not hard code.

Write separate programs to:

1. Write a program that uses a function to print 10 stars (*) on a single line. Ensure you declare your function prototype and include adequate comments.

2. Write a program that uses a function with 2 parameters (a character and an integer, e.g., *function_name(char, int)*. Your function must display the character parameter a certain number of times on one line where this number is the integer parameter. For example, if your function is *function_name(*,5)* it will display

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3. Write a program that uses a function to find the highest and lowest number of 3 values. These 3 values must be passed as parameters to the function, i.e., *function_name(int, int, int)*. Your function should find these values and display messages stating:

   The Highest value is x

   The Lowest value is y

   **Mandatory Exercise Question – You must complete and Demo to your Lab TA**

4. Write a program that uses 2 functions called *sum()* and *average()*. Your program must ask the user to enter 3 numbers inside the main(). Your main() should then pass these 3 values as parameters to the function *sum()*. This function should calculate the sum of the 3 numbers. Your function *sum()* should then pass the sum of the 3 numbers as a parameter to the function *average()*. The function *average()* should then calculate the average of the 3 numbers and display this on the screen.

Note: Be careful where each function is called and how you pass your parameters between functions.