

- 1) Write a program that outputs your ITSC.
- 2) Store your student ID in an int variable, then output it as "My student ID is ____".
- 3) Create a int variable x, then store any number in it. Check if it is positive, negative, or zero, using nested if statements.
- 4) Evaluate $1 + \dots + 100$ with a while loop.
- 5) Print a Christmas tree with asterisks using for loops. (See below)

- 6) Create a function with prototype `int factorial(int n)` that returns `n!`.
- 7) Create a function with prototype `int is_prime(int num)`. It returns 1 for prime numbers, 0 for composite numbers, and -1 for `num <= 1`.
- 8) Create a function with prototype `int mean(int arr[], int size)` that returns the mean of `arr[]`.
- 9) Create a decimal to hexadecimal converter that accepts input in the range `[0, 65535]`. Terminate the program if the number is out of range.