

CS101 Recursion Lab

- 1) Write a function which recursively return the factorial of a number
*For 4 the result is $4 * 3 * 2 * 1 = 24$*
- 2) Write a function which recursively returns the (nth triangle number) sum of all the numbers added to each other (starting from 1 to the number)
For 4 the result is $4 + 3 + 2 + 1 = 10$
- 3) Write a function which recursively checks if a word is a palindrome or not.

Palindrome:

each letter matches starting at the index of the first and index of the last letter
until the index of the start letter is equal or greater than the index of the last letter

*For 'level' the result is **TRUE**, For 'bevel' the result is **FALSE***

Suggested method signature, for string s:

```
def isPalindrome(s, startIndex, endIndex):
```