

National University of Singapore
School of Computing
CS1101S: Programming Methodology
Semester I, 2024/2025
S7-in-class
Stream Path Revision

Problems:

1. Write the function `n_of_n_stream()` that returns an infinite stream that contains
1, 2, 2, 3, 3, 3, 4, 4, 4, 4, 5, 5, 5, 5, 6, ...
2. Write a function `shorten_stream(s, k)` that takes as arguments a stream `s` and a *non-negative integer* number `k`, and returns a stream that contains the first `k` elements of `s`.
If the length of `s` is less than or equal to `k`, then the result stream will just behave like `s`.
Note that `s` may be an infinite stream.