1. $(4, 5, 6, 1, 2, 3)$
2. To construct a list of arbitrary s and t, starting with the list $a = (1, 2, \cdots, st-1, st)$, then we construct $\bigoplus_{i=1}^{t}(a_{s(t-i)+1}, \cdots, a_{s(t-i)+s})$. This satisfies the constraints of $s+1$ automatically by having these linearly increasing chunks of length s, then at the $s+1$st element, a numerical cliff is hit, and sinks from $a_{s(t-i)+s}$ to $a_{s(t-(i+1))+1}$. This is also the only time a decrease occurs in the list, satisfying the $t+1$ decreasing list rule.