$a_n = (\text{reverse}(\max((\text{num_digits}(a_{n-3}) + a_{n-2}), (\min(a_{n-2}, a_{n-3}, a_{n-2}) - n), \text{num_digits}((a_{n-1} + 1)))) + ((a_{n-3} - a_{n-2}) - n))$