$a_n = (\operatorname{reverse}((\operatorname{num\_digits}(a_{n-1}) + 1)) + (((\operatorname{reverse}(a_{n-2}) - \operatorname{reverse}(a_{n-1})) - \operatorname{reverse}(((a_{n-1} + 1) - n))) - (n+1)) + (((\operatorname{reverse}(a_{n-2}) - \operatorname{reverse}(a_{n-1})) - \operatorname{reverse}(((a_{n-1} + 1) - n)))) - (n+1)) + (((\operatorname{reverse}(a_{n-2}) - \operatorname{reverse}(a_{n-1})) - \operatorname{reverse}(((a_{n-1} + 1) - n)))) - (n+1)) + ((\operatorname{reverse}(a_{n-2}) - \operatorname{reverse}(a_{n-1})) - \operatorname{reverse}(((a_{n-1} + 1) - n)))) - ((\operatorname{reverse}(a_{n-1}) - \operatorname{reverse}(a_{n-1})))) - (\operatorname{reverse}(a_{n-1}) - \operatorname{reverse}(a_{n-1}))) - (\operatorname{reverse}(a_{n-1}) - \operatorname{reverse}(a_{n-1})))) - (\operatorname{reverse}(a_{n-1}) - \operatorname{reverse}(a_{n-1}))) - (\operatorname{reverse}(a_{n-1}) - \operatorname{reverse}(a_{n-1}))) - (\operatorname{reverse}(a_{n-1}) - \operatorname{reverse}(a_{n-1}))) - (\operatorname{reverse}(a_{n-1}) - \operatorname{reverse}(a_{n-1}))) - (\operatorname{reverse}(a_{n-1}) - \operatorname{reverse}(a_{n-1})))) - (\operatorname{reverse}(a_{n-1}) - \operatorname{reverse}(a_{n-1}))) - (\operatorname{reverse}(a_{n-1}) - revers$	))