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