secretOp (a, b), loop 1:

$a_{div} = a / 3$

$a_{rem1} = a \% 3$ $\quad\quad\quad$ ← possible values

$\{0, 1, 2\}$

$b_{div} = b / 3$

$b_{rem1} = b \% 3$ $\quad\quad\quad$ $\{0, 1, 2\}$

$b_{rem2} = b_{rem1} \% 2$ $\quad\quad$ $\{0, 1\}$

if $(b_{rem2} == 0)$ {

$\quad a_{rem1\_add} = a_{rem1} + 2$ $\quad$ $\{2, 3, 4\}$

} else {

$\quad a_{rem1\_add} = a_{rem1} + 1$ $\quad$ $\{1, 2, 3\}$

}

$a_{rem2} = a_{rem1\_add} \% 3$ $\quad$ $\{0, 1, 2\}$

s.push(a_{rem2})