



Know: random 3 **Needs:** random2 and random1

Note: The server and the player knows: $\text{SHA-3}(\text{password})$

f1(bit[] array_secret, bit[] valor_aleatorio):

- > $p = \text{array_secret} + \text{valor_aleatorio}$
- > $p = p \ll 1$
- > $p = p \bmod \text{valor_aleatorio}$

f2(bit[] array_secret, bit[] valor_aleatorio):

- > $p = \text{array_secret} \bmod \text{valor_aleatorio}$
- > $p = p + 3$
- > $p = p \gg 1$