

You must realize computations presented in my Google drive:

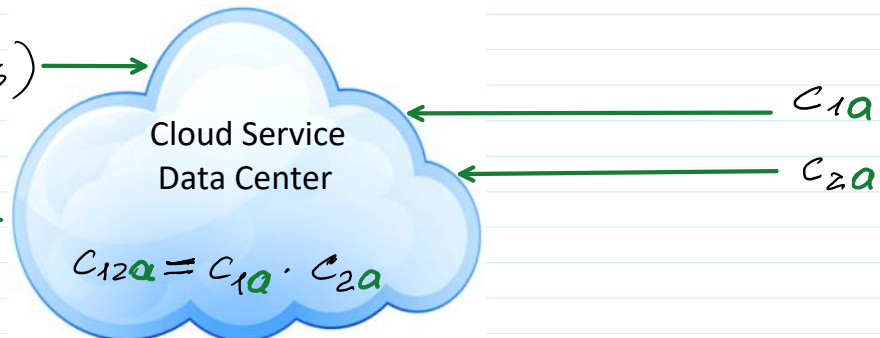
<https://docs.google.com/spreadsheets/d/1ZVSMGheC2RCZlpJr8XltwvmKe1I6Zwh/edit?usp=sharing&oid=11150225533491874828&rtpof=true&sd=true>



Query (Total Incomes)

$$C_{12a} = (E_{12a}, D_{12a})$$

$$\text{Dec}(x, C_{12a}) = N_{12}$$



% Finds discrete logarithm value corresponding to  
exponent value i

% by total scan of i from start by step until fin

% p - is a strong prime (Public Parameter)

% g - is a generator (Public Parameter)

% def - is a discrete exponent function value  
computed by mod\_exp(g,i,p)

% where dl=i is a searchable value of exponent

%

function dl = dlog(p, g, def, start, step, fin)

dl=0;

i=start;

while i<fin

ee=mod\_exp(g,i,p);

if ee==def

dl=i;

return;

endif

i+=step;

endwhile

disp('Exponent is not found!');

end

>> i1pi2=5000;

>> def=mod\_exp(g,i1pi2,p);

def = 143845522

>> n12=def;

start = 0;

>> step=100

step = 100

>> fin=9900

fin = 9900

>> def=mod\_exp(g,5000,p)

def = 143845522

>> dl = dlog(p, g, def, start, step, fin)

dl = 5000