```
DEF POWER_OF_THREE(m)
    IF m==0:
        RETURN 1
RETURN POWER_OF_THREE(m-1)·3
```

$3^0 = 1$

$3^k \quad k>1$

a list
m size(a)

```
DEF MINIMUM_INDEX(a, m):
    IF m==1
        RETURN 0
    min = MINIMUM_INDEX(a[1:m], m-1)+1
    IF a[min] < a[0]:
        RETURN min
    ELSE:
        RETURN m-1
```

$a = [3,4]$
$m = 2$

$a' = [4]$
$m = 1$

min 2

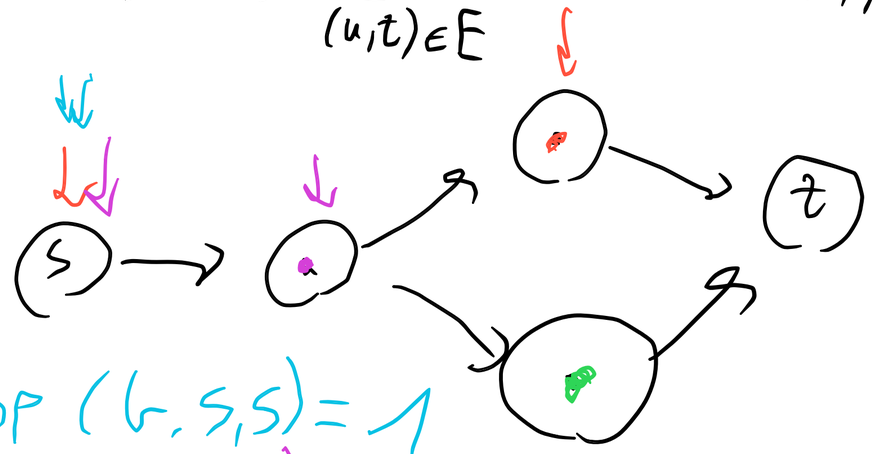
$a = [2,3,4]$

$min = 1 \rightarrow a' = [3,4]$

$min = 0 \quad \times \quad a'' = [4]$

c) $G=(V,E), \quad s \in S, \quad t \in V$

```
NUMBER_OF_PATHS(G, s, t)
    IF t==s THEN:
        RETURN 1
    RETURN Σ_{(u,t)∈E} NUMBER_OF_PATHS(G, s, u)
```



$NOP(G,S,S) = 1$

$NOP(G,S,\bullet) = 1$

$NOP(G,S,\bullet) = 1$

$NOP(G,S,\bullet) = NOP(G,S,\bullet) = 1$

$NOP(G,S,t) = NOP(G,S,\bullet) + NOP(G,S,\bullet) = 2$