***SQL***

**1 request**

1 = """

SELECT

DISTINCT ON(st\_id) st\_id as active\_users\_id

FROM

peas

WHERE

date\_trunc('month', timest) = '2020-03-01' and correct = True

GROUP BY

st\_id

, date\_trunc('hour', timest)

HAVING

count(correct) >= 20

LIMIT 5

"""

**2\_request**

2 = """

WITH client AS (SELECT

DISTINCT ON(r.st\_id) r.st\_id AS client\_id

FROM studs AS l RIGHT JOIN checks AS r

ON l.st\_id = r.st\_id)

, active\_user AS (SELECT

DISTINCT ON(st\_id) st\_id AS active\_user\_id

FROM peas WHERE correct = True GROUP BY

st\_id

, date\_trunc('hour', timest)

HAVING count(correct) >= 20)

, active\_math\_user AS (SELECT

DISTINCT ON(st\_id) st\_id AS active\_math\_user\_id

FROM peas WHERE subject = 'math' and correct = True GROUP BY

st\_id

, date\_trunc('hour', timest)

HAVING count(correct) >= 20)

,

active\_client AS (SELECT

r.st\_id AS active\_client\_id FROM client AS l

LEFT JOIN peas AS r

ON l.client\_id = r.st\_id

WHERE correct = True

GROUP BY

r.st\_id

, date\_trunc('hour', timest)

HAVING count(correct) >= 20)

,

active\_math AS (SELECT

r.st\_id AS active\_math\_id

FROM

client AS l

LEFT JOIN peas AS r ON l.client\_id = r.st\_id

WHERE subject = 'math' and correct = True

GROUP BY

r.st\_id

, date\_trunc('hour', timest)

HAVING count(correct) >= 20)

SELECT

SUM(money) / (SELECT COUNT(st\_id) FROM studs) AS ARPU

, SUM(money) / (SELECT COUNT(active\_user\_id) FROM active\_user) AS ARPAU

, (SELECT count(client\_id)::numeric FROM client) /

(SELECT COUNT(st\_id) FROM studs) AS CR

, (SELECT count(active\_client\_id)::numeric FROM active\_client) /

(SELECT count(active\_user\_id)::numeric FROM active\_user)

AS active\_CR

, (SELECT count(active\_math\_id)::numeric FROM active\_math) /

(SELECT count(active\_math\_user\_id) FROM active\_math\_user)

AS active\_math\_CR

FROM checks

"""