

Question 1

household_selection.sql

This procedure tends to find the potential household who applied to the specific pet with pid and has higher wage than minimum wage required.

Loop through all the households which applied to the pet. Compare their wage with the required wage to adopt the pet (input). If households' wage is lower:

- Make a document
- Make a denial document with reasoning: too low wage
- The household receives the document

If household' wage is higher than the desired wage:

- Keep the value in the maximum wage buffer to compare with other potential households
- If next household's wage is higher, change the value of maximum wage buffer
- Make a document
- Make an accepted document with employee assigned to it and pickup date
- The household receives the document

Before the procedure:

```
cs421=> SELECT * FROM pet WHERE pid = 12987;
  pid |   date   | weight | breed | species | kno | mid | birthdate | name
-----+-----+-----+-----+-----+-----+-----+-----+-----
 12987 | 2020-02-01 |   10.5 | Beagle | Dog      | 7   | 30392 | 2014-05-01 | Ella
(1 row)

cs421=> SELECT * FROM document;
 docnumber | date
-----+-----
(0 rows)

cs421=> SELECT * FROM denialdocument;
 docnumber | reasoning
-----+-----
(0 rows)

cs421=> SELECT * FROM accepteddocument;
 docnumber | eid | transactionid | insurancenum | pickupdate | furtherinstructions
-----+-----+-----+-----+-----+-----
(0 rows)

cs421=> SELECT * FROM receive;
 docnumber | address
-----+-----
(0 rows)
```

After the procedure: `SELECT household_selection(12987,100000,9018);`

```
cs421=> SELECT * FROM pet WHERE pid = 12987;
  pid |   date   | weight | breed | species |   kno   | mid | birthdate | name
-----+-----+-----+-----+-----+-----+-----+-----+-----
12987 | 2020-02-01 | 10.5 | Beagle | Dog | To be adopted | 30392 | 2014-05-01 | Ella
(1 row)

cs421=> SELECT * FROM document;
 docnumber |   date
-----+-----
1          | 2020-04-12
2          | 2020-04-12
3          | 2020-04-12
(3 rows)

cs421=> SELECT * FROM denialdocument;
 docnumber | reasoning
-----+-----
1          | The potential household wage is too low to adopt the pet
2          | The potential household wage is too low to adopt the pet
(2 rows)

cs421=> SELECT * FROM accepteddocument;
 docnumber | eid | transactionid | insurancenum | pickupdate | furtherinstructions
-----+-----+-----+-----+-----+-----
3          | 9018 |              |              | 2020-04-19 | 
(1 row)

cs421=> SELECT * FROM receive;
 docnumber | address
-----+-----
1          | 719 Rue de la Montagne, Montreal, QC, H3S8E9
2          | 88 Rue Aylmer, Montreal, QC, H9AK0G
3          | 1975 Rue Clarke, Montreal, QC, H6U9I8
(3 rows)
```