```
RESULTAT DES TESTS

========================== test session starts ===============================
platform darwin -- Python 3.6.2, pytest-5.2.2, py-1.8.0, pluggy-0.13.0
rootdir: /Users/emiliendurif/Dropbox/cpge/ipt_mpsi_ds/DS08/correction_auto/scrip
t/DS_08_grosmaire
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

test_TP.py ....F...FFFFFFFFFF.FFFF                                       [100%]

================================== FAILURES ===================================
_____ test_Q4_req _____

    def test_Q4_req ():
>       assert requete(sol_Q4_req) == requete(Q4_req)
E       AssertionError: assert [('DUHAMEL', ... 'Mme.'), ...] == [('BOYER', 'M..
.Melle.'), ...]
E         At index 0 diff: ('DUHAMEL', 'Evelyne', 'Melle.') != ('BOYER', 'Martin
e', 'Mme.')
E         Use -v to get the full diff

test_TP.py:110: AssertionError
_____ test_Q7_req _____

    def test_Q7_req ():
>       assert requete(sol_Q7_req) == requete(Q7_req)
E       AssertionError: assert [('DUPONT', '...-92-21'), ...] == [('DUPONT', '..
.-43-21'), ...]
E         At index 2 diff: ('DUBOIS', '02-41-58-89-52') != ('DUPONT', '01-44-28-
52-50')
E         Right contains 13617 more items, first extra item: ('DUPONT', '05-59-0
3-54-09')
E         Use -v to get the full diff

test_TP.py:122: AssertionError
_____ test_Q8_req _____

    def test_Q8_req ():
>       assert requete(sol_Q8_req) == requete(Q8_req)
E       AssertionError: assert [('MARTIN',)] == [('MARTIN', 'Jean-Pierre')]
E         At index 0 diff: ('MARTIN',) != ('MARTIN', 'Jean-Pierre')
E         Use -v to get the full diff

test_TP.py:125: AssertionError
_____ test_Q9_req _____

    def test_Q9_req ():
>       assert requete(sol_Q9_req) == requete(Q9_req)
E       AssertionError: assert [('MARTIN', 2)] == [(2,)]
E         At index 0 diff: ('MARTIN', 2) != (2,)
E         Use -v to get the full diff

test_TP.py:128: AssertionError
_____ test_Q10_res _____

    def test_Q10_res ():
>       assert sol_Q10_res.upper() ==  Q10_res.upper()
E       AssertionError: assert '(86.0, 120.0)' == '86% ET 120'
E         - (86.0, 120.0)
E         + 86% ET 120

test_TP.py:131: AssertionError
_____ test_Q10_req _____
```

```
    def test_Q10_req ():
>       assert requete(sol_Q10_req) == requete(Q10_req)
E       assert [(86.0, 120.0)] == [(86.0,), (120.0,)]
E         At index 0 diff: (86.0, 120.0) != (86.0,)
E         Right contains one more item: (120.0,)
E         Use -v to get the full diff

test_TP.py:134: AssertionError
_____ test_Q11_res _____

    def test_Q11_res ():
>       assert sol_Q11_res.upper() ==  Q11_res.upper()
E       AssertionError: assert '(86.0, 120)' == '86% ET 120'
E         - (86.0, 120)
E         + 86% ET 120

test_TP.py:137: AssertionError
_____ test_Q11_req _____

    def test_Q11_req ():
>       assert requete(sol_Q11_req) == requete(Q11_req)
E       assert [(86.0, 120)] == [(86,), (120,)]
E         At index 0 diff: (86.0, 120) != (86,)
E         Right contains one more item: (120,)
E         Use -v to get the full diff

test_TP.py:140: AssertionError
_____ test_Q12_req _____

    def test_Q12_req ():
>       assert requete(sol_Q12_req) == requete(Q12_req)
E       assert [(1,), (2,), ...], (26,), ...] == [(1,), (3,), ...,), (2,), ...]
E         At index 1 diff: (2,) != (3,)
E         Right contains 915 more items, first extra item: (689,)
E         Use -v to get the full diff

test_TP.py:143: AssertionError
_____ test_Q13_req _____

    def test_Q13_req ():
>       assert requete(sol_Q13_req) == requete(Q13_req)
E       assert [(1,), (4,), ...,), (8,), ...] == [(1,), (1,), ...,), (1,), ...]
E         At index 1 diff: (4,) != (1,)
E         Right contains 2510918 more items, first extra item: (6,)
E         Use -v to get the full diff

test_TP.py:146: AssertionError
_____ test_Q15_res _____

    def test_Q15_res ():
>       assert sol_Q15_res.upper() ==  Q15_res.upper()
E       assert "('MEDARD', 'JACQUES', 1440)" == 'AUCUN CLIENT... DE 120 EUROS'
E         - ('MEDARD', 'JACQUES', 1440)
E         + AUCUN CLIENT N'A EU UNE REMISE PLUS IMPORTANTE QUE LES AUTRES, VU QU
E IL N'Y A QU'UNE REMISE DE 86% OU DE 120 EUROS

test_TP.py:152: AssertionError
_____ test_Q15_req _____

    def test_Q15_req ():
>       assert requete(sol_Q15_req) == requete(Q15_req)
E       AssertionError: assert [('MEDARD', 'Jacques', 1440)] == []
E         Left contains one more item: ('MEDARD', 'Jacques', 1440)
E         Use -v to get the full diff

test_TP.py:155: AssertionError
_____ test_Q15_res2 _____
```

```
     def test_Q15_res2 ():
>        assert sol_Q15_res2.upper() ==  Q15_res.upper()
E        assert "('GARREAU', 'PAUL', 22)" == 'AUCUN CLIENT... DE 120 EUROS'
E          - ('GARREAU', 'PAUL', 22)
E          + AUCUN CLIENT N'A EU UNE REMISE PLUS IMPORTANTE QUE LES AUTRES, VU QU
E IL N'Y A QU'UNE REMISE DE 86% OU DE 120 EUROS

test_TP.py:158: AssertionError
_____ test_Q15_req2 _____

     def test_Q15_req2 ():
>        assert requete(sol_Q15_req2) == requete(Q15_req)
E        AssertionError: assert [('GARREAU', 'Paul', 22)] == []
E          Left contains one more item: ('GARREAU', 'Paul', 22)
E          Use -v to get the full diff

test_TP.py:161: AssertionError
========================= 14 failed, 8 passed in 5.09s =========================
```

```
NOM = "GROSMAIRE"
Prenom = "Arthur"
Classe = "MPSI2"
alpha="71"

## Question 1
Q1_req = "SELECT CLI_NOM,CLI_PRENOM,TIT_CODE FROM T_CLIENT;"

## Question 2
Q2_req = "SELECT COUNT(*) FROM T_CLIENT;"
Q2_res = "88"

## Question 3
Q3_req = "SELECT CLI_NOM,CLI_PRENOM FROM T_CLIENT WHERE TIT_CODE='Mme.';"

## Question 4
Q4_req = "SELECT CLI_NOM,CLI_PRENOM,TIT_CODE FROM T_CLIENT WHERE TIT_CODE='Mme.'
 UNION SELECT CLI_NOM,CLI_PRENOM,TIT_CODE FROM T_CLIENT WHERE TIT_CODE='Melle.';
"


## Question 5
Q5_req = "SELECT COUNT(*) AS CLI_ID FROM T_CLIENT WHERE TIT_CODE='Mme.' OR TIT_C
ODE='Melle.';"
Q5_res = "16"

## Question 6
Q6_req = "SELECT CLI_NOM AS Noms,CLI_PRENOM AS Prenoms FROM T_CLIENT  WHERE TIT_
CODE='Mme.' OR TIT_CODE='Melle.' ORDER BY CLI_NOM asc, CLI_PRENOM asc;"


## Question 7
Q7_req = "SELECT CLI_NOM,TEL_NUMERO FROM T_CLIENT JOIN T_TELEPHONE;"

## Question 8
Q8_req = "SELECT CLI_NOM,CLI_PRENOM FROM T_CLIENT GROUP BY CLI_NOM HAVING COUNT(
CLI_NOM)>1;"

## Question 9
Q9_req = "SELECT COUNT(*) FROM T_CLIENT GROUP BY CLI_NOM HAVING COUNT(CLI_NOM)>1
;"
Q9_res = "2"

## Question 10
Q10_req = "SELECT AVG(LIF_REMISE_POURCENT) FROM T_LIGNE_FACTURE UNION SELECT AVG
(LIF_REMISE_MONTANT) FROM T_LIGNE_FACTURE;"
Q10_res = "86% et 120"

## Question 11
Q11_req = "SELECT MAX(LIF_REMISE_POURCENT) FROM T_LIGNE_FACTURE UNION SELECT MAX
(LIF_REMISE_MONTANT) FROM T_LIGNE_FACTURE;"
Q11_res = "86% et 120"

## Question 12
Q12_req = "SELECT FAC_ID AS fac_id1 FROM T_LIGNE_FACTURE WHERE LIF_REMISE_MONTAN
T>=0 OR LIF_REMISE_POURCENT>=0;"


## Question 13
Q13_req = "SELECT CLI_ID FROM T_FACTURE JOIN T_LIGNE_FACTURE WHERE LIF_REMISE_MO
NTANT>=0 OR LIF_REMISE_POURCENT>=0;"

## Question 14
Q14_req = "SELECT CLI_ID FROM T_FACTURE JOIN T_LIGNE_FACTURE WHERE LIF_REMISE_MO
NTANT=NULL OR LIF_REMISE_POURCENT=NULL;"


## Question 15
```

```
Q15_req = ""
Q15_res ="Aucun client n'a eu une remise plus importante que les autres, vu que
il n'y a qu'une remise de 86% ou de 120 euros"
```