```
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_abid
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

test_TP.py F...F...FF.F.F...FFFFF                                        [100%]

=================================== FAILURES ===================================
_____________________________________ test_Q1_req _____________________________________

    def test_Q1_req ():
>       assert requete(sol_Q1_req) == requete(Q1_req)
E       AssertionError: assert [('DUPONT', '...', 'M.'), ...] == [('M.', 'DUPO..
.'Alain'), ...]
E         At index 0 diff: ('DUPONT', 'Alain', 'M.') != ('M.', 'DUPONT', 'Alain'
)
E         Use -v to get the full diff

test_TP.py:98: AssertionError
_____________________________________ test_Q4_req _____________________________________

    def test_Q4_req ():
>       assert requete(sol_Q4_req) == requete(Q4_req)
E       AssertionError: assert [('DUHAMEL', ... 'Mme.'), ...] == [('Melle.', '..
.Carmen'), ...]
E         At index 0 diff: ('DUHAMEL', 'Evelyne', 'Melle.') != ('Melle.', 'DUHAM
EL', 'Evelyne')
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', '..
.-52-50'), ...]
E         At index 0 diff: ('DUPONT', '01-45-42-56-63') != ('DUPONT', 'Alain', '
01-45-42-56-63')
E         Right contains 48 more items, first extra item: ('AIACH', 'Alexandre',
 '04-91-52-51-52')
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 [('BENATTAR',), ('MARTIN',)] == [('MARTIN', '...'
, 'Bernard')]
E         At index 0 diff: ('BENATTAR',) != ('MARTIN', 'Marc')
E         Right contains 2 more items, first extra item: ('BENATTAR', 'Pierre')
E         Use -v to get the full diff

test_TP.py:125: AssertionError
_____________________________________ test_Q10_res _____________________________________

    def test_Q10_res ():
>       assert sol_Q10_res.upper() ==  Q10_res.upper()
E       AssertionError: assert '(47.0, 81.0)' == 'POURCENTAGE ...ONTANT : 81.0'
E         - (47.0, 81.0)
E         + POURCENTAGE : 47.0 ET MONTANT : 81.0
```

```
test_TP.py:131: AssertionError
_____________________________________ test_Q11_res _____________________________________

    def test_Q11_res ():
>       assert sol_Q11_res.upper() ==  Q11_res.upper()
E       AssertionError: assert '(47.0, 81)' == 'POURCENTAGE ... MONTANT : 81'
E         - (47.0, 81)
E         + POURCENTAGE : 47 ET MONTANT : 81

test_TP.py:137: AssertionError
_____________________________________ test_Q14_req _____________________________________

    def test_Q14_req ():
>       assert requete(sol_Q14_req) == requete(Q14_req)
E       assert [] == [(1,), (2,), ...,), (6,), ...]
E         Right contains 93 more items, first extra item: (1,)
E         Use -v to get the full diff

test_TP.py:149: AssertionError
_____________________________________ test_Q15_res _____________________________________

    def test_Q15_res ():
>       assert sol_Q15_res.upper() ==  Q15_res.upper()
E       assert "('SILLET', 'JACQUES', 891)" == 'GÉRARD,MATHIEU,1037'
E         - ('SILLET', 'JACQUES', 891)
E         + GÉRARD,MATHIEU,1037

test_TP.py:152: AssertionError
_____________________________________ test_Q15_req _____________________________________

    def test_Q15_req ():
>       assert requete(sol_Q15_req) == requete(Q15_req)
E       AssertionError: assert [('SILLET', 'Jacques', 891)] == [('MATHIEU', 'Gér
ard', 1037)]
E         At index 0 diff: ('SILLET', 'Jacques', 891) != ('MATHIEU', 'Gérard', 1
037)
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)" == 'GÉRARD,MATHIEU,1037'
E         - ('GARREAU', 'PAUL', 22)
E         + GÉRARD,MATHIEU,1037

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)] == [('MATHIEU', 'Gérard
', 1037)]
E         At index 0 diff: ('GARREAU', 'Paul', 22) != ('MATHIEU', 'Gérard', 1037
)
E         Use -v to get the full diff

test_TP.py:161: AssertionError
======================== 11 failed, 11 passed in 0.36s =========================
```

```
NOM = "ABID"
Prenom = "Hamza"
Classe = "MPSI2"
alpha="32"

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

## Question 2
Q2_req = "SELECT COUNT(*) FROM T_CLIENT;"
Q2_res = "93"

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

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

## Question 5
Q5_req = "SELECT COUNT(*) FROM T_CLIENT WHERE TIT_CODE IN ('Mme.', 'Melle.');"
Q5_res = "16"

## Question 6
Q6_req = "SELECT CLI_NOM AS Noms, CLI_PRENOM AS Prenoms FROM T_CLIENT WHERE TIT_
CODE IN ('Mme.', 'Melle.') ORDER BY Noms, Prenoms ASC;"

## Question 7
Q7_req = "SELECT cl.CLI_NOM, cl.CLI_PRENOM, tel.TEL_NUMERO FROM T_CLIENT as cl I
NNER JOIN T_TELEPHONE as tel ON cl.CLI_ID = tel.CLI_ID;"

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

## Question 9
Q9_req = "SELECT CLI_NOM, COUNT(*) as nb_occur FROM T_CLIENT GROUP BY CLI_Nom HA
VING nb_occur > 1"
Q9_res = "(BENATTAR, 2) et (MARTIN, 2)"

## Question 10
Q10_req = "SELECT AVG(LIF_REMISE_POURCENT), AVG(LIF_REMISE_MONTANT) FROM T_LIGNE
_FACTURE;"
Q10_res = "Pourcentage : 47.0 et Montant : 81.0"

## Question 11
Q11_req = "SELECT MAX(LIF_REMISE_POURCENT), MAX(LIF_REMISE_MONTANT) FROM T_LIGNE
_FACTURE;"
Q11_res = "Pourcentage : 47 et Montant : 81"

## Question 12
Q12_req = "SELECT DISTINCT FAC_ID as fac_id1 FROM T_LIGNE_FACTURE WHERE (LIF_REM
ISE_MONTANT IS NOT NULL) OR (LIF_REMISE_POURCENT IS NOT NULL);"

## Question 13
Q13_req = "SELECT DISTINCT CLI_ID FROM T_FACTURE AS fac WHERE fac.FAC_ID IN (SEL
ECT DISTINCT FAC_ID as fac_id1 FROM T_LIGNE_FACTURE WHERE (LIF_REMISE_MONTANT IS
 NOT NULL) OR (LIF_REMISE_POURCENT IS NOT NULL));"

## Question 14
Q14_req = "SELECT DISTINCT CLI_ID FROM T_FACTURE AS fac WHERE fac.FAC_ID IN (SEL
ECT DISTINCT FAC_ID FROM T_LIGNE_FACTURE WHERE (LIF_REMISE_MONTANT IS NULL) AND
(LIF_REMISE_POURCENT IS NULL));"

## Question 15
Q15_req = "SELECT cli.CLI_NOM as nom, cli.CLI_PRENOM as prenom, SUM(LIF_REMISE_M
ONTANT)+SUM(LIF_REMISE_POURCENT) as valeur_max FROM T_FACTURE as fac INNER JOIN
T_CLIENT as cli ON fac.CLI_ID = cli.CLI_ID INNER JOIN (SELECT CLI_ID, MAX(nb) as
```

```
 max_nb FROM (SELECT CLI_ID, COUNT(*) as nb FROM T_FACTURE AS fac WHERE fac.FAC_
ID IN (SELECT DISTINCT FAC_ID as fac_id1 FROM T_LIGNE_FACTURE WHERE (LIF_REMISE_
MONTANT IS NOT NULL) OR (LIF_REMISE_POURCENT IS NOT NULL)) GROUP BY CLI_ID)) as
max_tab ON fac.CLI_ID = max_tab.CLI_ID INNER JOIN T_LIGNE_FACTURE as ligfac ON l
igfac.FAC_ID = fac.FAC_ID;"
Q15_res ="Gérard,Mathieu,1037"

# Il y avait plusieurs personnes qui ont bénéficié du plus grand nombre de remis
es or une seule était demandée.
# J'ai donc mis celle que me proposait directement sqlite
```

```
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_ahamada
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

test_TP.py ..........F.F.FF.FFF.                                         [100%]

=================================== FAILURES ===================================
_____________________________________ test_Q10_res _____________________________________

    def test_Q10_res ():
>       assert sol_Q10_res.upper() ==  Q10_res.upper()
E       AssertionError: assert '(32.0, 66.0)' == '32.0 ; 66.0'
E         - (32.0, 66.0)
E         ? -    ^     -
E         + 32.0 ; 66.0
E         ?     ^^

test_TP.py:131: AssertionError
_____________________________________ test_Q11_res _____________________________________

    def test_Q11_res ():
>       assert sol_Q11_res.upper() ==  Q11_res.upper()
E       AssertionError: assert '(32.0, 66)' == '32 ; 66'
E         - (32.0, 66)
E         + 32 ; 66

test_TP.py:137: AssertionError
_____________________________________ test_Q12_req _____________________________________

    def test_Q12_req ():
>       assert requete(sol_Q12_req) == requete(Q12_req)
E       assert [(1,), (2,), ...), (27,), ...] == [(1,), (3,), ...,), (2,), ...]
E         At index 1 diff: (2,) != (3,)
E         Right contains 848 more items, first extra item: (668,)
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,), (2,), ...,), (6,), ...] == [(1,), (1,), ...,), (1,), ...]
E         At index 1 diff: (2,) != (1,)
E         Right contains 1059 more items, first extra item: (10,)
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', 792)" == 'GARREAU,PAUL,22'
E         - ('MEDARD', 'JACQUES', 792)
E         + GARREAU,PAUL,22

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', 792)] == [('GARREAU', 'Pau
l', 22)]
E         At index 0 diff: ('MEDARD', 'Jacques', 792) != ('GARREAU', 'Paul', 22)
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)" == 'GARREAU,PAUL,22'
E         - ('GARREAU', 'PAUL', 22)
E         ? --       - --    - -  -
E         + GARREAU,PAUL,22

test_TP.py:158: AssertionError
======================== 7 failed, 15 passed in 0.36s ========================

MODIFICATIONS EFFECTUEES SUR LE FICHIER RENDU
=============================================

--- prog.py.orig        2020-06-22 08:23:20.000000000 +0200
+++ prog.py     2020-06-24 14:55:32.000000000 +0200
@@ -28,6 +28,7 @@
 ## Question 7
 Q7_req = "select T_CLIENT.CLI_NOM as Noms, T_TELEPHONE.TEL_NUMERO from T_CLIENT
 join T_TELEPHONE on T_TELEPHONE.CLI_ID=T_CLIENT.CLI_ID where T_TELEPHONE.TYP_CO
DE='TEL';"

+
 ## Question 8
 Q8_req = "SELECT CLI_NOM from T_CLIENT group by CLI_NOM having count(CLI_NOM)>1
;"

@@ -51,13 +52,9 @@
 Q13_req = "select T_facture.CLI_ID from T_FACTURE join T_LIGNE_FACTURE on T_LIG
NE_FACTURE.FAC_ID=T_FACTURE.FAC_ID where LIF_REMISE_MONTANT>0 or LIF_REMISE_POUR
CENT>0;"

 ## Question 14
-Q14_req = "SELECT T_FACTURE.CLI_ID FROM T_FACTURE
-EXCEPT
-SELECT T_FACTURE.CLI_ID FROM T_FACTURE, T_LIGNE_FACTURE WHERE (LIF_REMISE_POURC
ENT>0 OR LIF_REMISE_MONTANT>0) AND T_FACTURE.FAC_ID=T_LIGNE_FACTURE.FAC_ID"
+Q14_req = "SELECT T_FACTURE.CLI_ID FROM T_FACTURE EXCEPT SELECT T_FACTURE.CLI_I
D FROM T_FACTURE, T_LIGNE_FACTURE WHERE (LIF_REMISE_POURCENT>0 OR LIF_REMISE_MON
TANT>0) AND T_FACTURE.FAC_ID=T_LIGNE_FACTURE.FAC_ID"


 ## Question 15
-Q15_req = "select T_CLIENT.CLI_NOM,T_CLIENT.CLI_PRENOM, max(nb_reduc) from
-(select T_FACTURE.CLI_ID,count(T_FACTURE.CLI_ID) as nb_reduc from T_FACTURE joi
n T_LIGNE_FACTURE on T_LIGNE_FACTURE.FAC_ID=T_FACTURE.FAC_ID where LIF_REMISE_MO
NTANT>0 or LIF_REMISE_POURCENT>0 group by CLI_ID) as c
-join T_CLIENT on T_CLIENT.CLI_ID=c.CLI_ID;"
+Q15_req = "select T_CLIENT.CLI_NOM,T_CLIENT.CLI_PRENOM, max(nb_reduc) from (sel
ect T_FACTURE.CLI_ID,count(T_FACTURE.CLI_ID) as nb_reduc from T_FACTURE join T_L
IGNE_FACTURE on T_LIGNE_FACTURE.FAC_ID=T_FACTURE.FAC_ID where LIF_REMISE_MONTANT
>0 or LIF_REMISE_POURCENT>0 group by CLI_ID) as c join T_CLIENT on T_CLIENT.CLI_
ID=c.CLI_ID;"
 Q15_res ="GARREAU,Paul,22"
```

```
NOM = "AHAMADA"
Prenom = "Hakim"
Classe = "MPSI2"
alpha="17"

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

## Question 2
Q2_req = "select count(*) as nb_client FROM T_CLIENT ;"
Q2_res = "97"

## 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
.' or TIT_CODE='Melle.';"


## Question 5
Q5_req = "SELECT count(*) FROM T_CLIENT where TIT_CODE='Mme.' or TIT_CODE='Melle
.';"
Q5_res = "17"

## Question 6
Q6_req = "SELECT CLI_NOM as Noms, CLI_PRENOM as Prénoms FROM T_CLIENT where TIT_
CODE='Mme.' or TIT_CODE='Melle.' order by Noms;"


## Question 7
Q7_req = "select T_CLIENT.CLI_NOM as Noms, T_TELEPHONE.TEL_NUMERO from T_CLIENT
join T_TELEPHONE on T_TELEPHONE.CLI_ID=T_CLIENT.CLI_ID where T_TELEPHONE.TYP_COD
E='TEL';"

## Question 8
Q8_req = "SELECT CLI_NOM from T_CLIENT group by CLI_NOM having count(CLI_NOM)>1;
"

## Question 9
Q9_req = "SELECT CLI_NOM, count(cli_nom) from T_CLIENT group by CLI_NOM having c
ount(CLI_NOM)>1;"
Q9_res = "BENATTAR 2 ; MARTIN 3"

## Question 10
Q10_req = "select avg(LIF_remise_pourcent) as moyenne_pourcent, avg(LIF_remise_m
ontant) as remise_montant from T_LIGNE_FACTURE;"
Q10_res = "32.0 ; 66.0"

## Question 11
Q11_req = "select max(LIF_remise_pourcent) as max_pourcent, max(LIF_remise_monta
nt) as max_montant from T_LIGNE_FACTURE;"
Q11_res = "32 ; 66"

## 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 T_facture.CLI_ID from T_FACTURE join T_LIGNE_FACTURE on T_LIGN
E_FACTURE.FAC_ID=T_FACTURE.FAC_ID where LIF_REMISE_MONTANT>0 or LIF_REMISE_POURC
ENT>0;"

## Question 14
Q14_req = "SELECT T_FACTURE.CLI_ID FROM T_FACTURE
EXCEPT
SELECT T_FACTURE.CLI_ID FROM T_FACTURE, T_LIGNE_FACTURE WHERE (LIF_REMISE_POURCE
```

```
NT>0 OR LIF_REMISE_MONTANT>0) AND T_FACTURE.FAC_ID=T_LIGNE_FACTURE.FAC_ID"


## Question 15
Q15_req = "select T_CLIENT.CLI_NOM,T_CLIENT.CLI_PRENOM, max(nb_reduc) from
(select T_FACTURE.CLI_ID,count(T_FACTURE.CLI_ID) as nb_reduc from T_FACTURE join
 T_LIGNE_FACTURE on T_LIGNE_FACTURE.FAC_ID=T_FACTURE.FAC_ID where LIF_REMISE_MON
TANT>0 or LIF_REMISE_POURCENT>0 group by CLI_ID) as c
join T_CLIENT on T_CLIENT.CLI_ID=c.CLI_ID;"
Q15_res ="GARREAU,Paul,22"
```

```
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_azahriou
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

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

=================================== FAILURES ===================================
_____________________________________ test_Q10_res _____________________________________

    def test_Q10_res ():
>       assert sol_Q10_res.upper() ==  Q10_res.upper()
E       AssertionError: assert '(103.0, 137.0)' == '103.0,137.0'
E         - (103.0, 137.0)
E         ? -      -     -
E         + 103.0,137.0

test_TP.py:131: AssertionError
_____________________________________ test_Q11_res _____________________________________

    def test_Q11_res ():
>       assert sol_Q11_res.upper() ==  Q11_res.upper()
E       AssertionError: assert '(103.0, 137)' == '103,137'
E         - (103.0, 137)
E         + 103,137

test_TP.py:137: 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 922 more items, first extra item: (668,)
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,), (2,), ...,), (6,), ...] == [(1,), (1,), ...,), (1,), ...]
E         At index 1 diff: (2,) != (1,)
E         Right contains 1025 more items, first extra item: (7,)
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 "('SILLET', 'JACQUES', 1507)" == 'NOM,PRENOM,MONTANT'
E         - ('SILLET', 'JACQUES', 1507)
E         + NOM,PRENOM,MONTANT

test_TP.py:152: AssertionError
_____________________________________ test_Q15_req _____________________________________

    def test_Q15_req ():
>       assert requete(sol_Q15_req) == requete(Q15_req)
E       AssertionError: assert [('SILLET', 'Jacques', 1507)] == []
```

```
E         Left contains one more item: ('SILLET', 'Jacques', 1507)
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)" == 'NOM,PRENOM,MONTANT'
E         - ('GARREAU', 'PAUL', 22)
E         + NOM,PRENOM,MONTANT

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
========================== 8 failed, 14 passed in 0.31s ==========================
```

```
NOM = "Azahriou"
Prenom = "Mohamed"
Classe = "mpsi2"
alpha="88"

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

## Question 2
Q2_req = "select count(*) as nb_client from T_CLIENT"
Q2_res = "86"

## 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
.' or TIT_CODE='Melle.';"


## Question 5
Q5_req = "SELECT count(*) FROM T_CLIENT where TIT_CODE='Mme.' or TIT_CODE='Melle
.';"
Q5_res = "13"

## Question 6
Q6_req = "SELECT CLI_NOM as Noms, CLI_PRENOM as Prénoms FROM T_CLIENT where TIT_
CODE='Mme.' or TIT_CODE='Melle.' order by Noms;"


## Question 7
Q7_req = "select T_CLIENT.CLI_NOM as Noms, T_TELEPHONE.TEL_NUMERO from T_CLIENT
join T_TELEPHONE on T_TELEPHONE.CLI_ID=T_CLIENT.CLI_ID where T_TELEPHONE.TYP_COD
E='TEL';"

## Question 8
Q8_req = "SELECT CLI_NOM from T_CLIENT group by CLI_NOM having count(CLI_NOM)>1;
"

## Question 9
Q9_req = "SELECT CLI_NOM, count(cli_nom) from T_CLIENT group by CLI_NOM having c
ount(CLI_NOM)>1"
Q9_res = "BENATTAR2,MARTIN2"

## Question 10
Q10_req = "select avg(LIF_remise_pourcent) as moyenne_pourcent, avg(LIF_remise_m
ontant) from T_LIGNE_FACTURE;"
Q10_res = "103.0,137.0"

## Question 11
Q11_req = "select max(LIF_remise_pourcent) as max_pourcent, max(LIF_remise_monta
nt) as max_montant from T_LIGNE_FACTURE;"
Q11_res = "103,137"

## Question 12
Q12_req = "select FAC_ID as fact_id1 from T_LIGNE_FACTURE where LIF_REMISE_MONTA
NT>0 or LIF_REMISE_POURCENT>0;"


## Question 13
Q13_req = "select T_facture.CLI_ID from T_FACTURE join T_LIGNE_FACTURE on T_LIGN
E_FACTURE.FAC_ID=T_FACTURE.FAC_ID where LIF_REMISE_MONTANT>0 or LIF_REMISE_POURC
ENT>0;"

## Question 14
Q14_req = ""
```

```
## Question 15
Q15_req = ""
Q15_res ="nom,prenom,montant"
```

```
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_baron
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

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

=================================== FAILURES ===================================
_____________________________________ test_Q1_req _____________________________________

    def test_Q1_req ():
>       assert requete(sol_Q1_req) == requete(Q1_req)
E       AssertionError: assert [('DUPONT', '...', 'M.'), ...] == [('M.', 'DUPO..
.'Alain'), ...]
E         At index 0 diff: ('DUPONT', 'Alain', 'M.') != ('M.', 'DUPONT', 'Alain'
)
E         Use -v to get the full diff

test_TP.py:98: AssertionError
_____________________________________ test_Q4_req _____________________________________

    def test_Q4_req ():
>       assert requete(sol_Q4_req) == requete(Q4_req)
E       AssertionError: assert [('DUHAMEL', ... 'Mme.'), ...] == [('Melle.', '..
.onique'), ...]
E         At index 0 diff: ('DUHAMEL', 'Evelyne', 'Melle.') != ('Melle.', 'DUHAM
EL', 'Evelyne')
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', '..
.-52-50'), ...]
E         At index 2 diff: ('DUBOIS', '02-41-58-89-52') != ('DUPONT', '01-44-28-
52-50')
E         Right contains 48 more items, first extra item: ('GAL', '04-90-78-10-6
8')
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 [('BENATTAR',), ('MARTIN',)] == [('BENATTAR',...J
ean-Pierre')]
E         At index 0 diff: ('BENATTAR',) != ('BENATTAR', 'Bernard')
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 [('BENATTAR',...('MARTIN', 3)] == [(8,), (6,)]
E         At index 0 diff: ('BENATTAR', 2) != (8,)
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 '(72.0, 106.0)' == '72.0  , 106.0'
E         - (72.0, 106.0)
E         ? -          -
E         + 72.0  , 106.0
E         ?     ++

test_TP.py:131: AssertionError
_____________________________________ test_Q11_res _____________________________________

    def test_Q11_res ():
>       assert sol_Q11_res.upper() ==  Q11_res.upper()
E       AssertionError: assert '(72.0, 106)' == '72,  106'
E         - (72.0, 106)
E         + 72,  106

test_TP.py:137: AssertionError
_____________________________________ test_Q13_req _____________________________________

    def test_Q13_req ():
>       assert requete(sol_Q13_req) == requete(Q13_req)
E       assert [(1,), (2,), ...,), (6,), ...] == []
E         Left contains 92 more items, first extra item: (1,)
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 "('SILLET', 'JACQUES', 1166)" == 'NOM,PRENOM,MONTANT'
E         - ('SILLET', 'JACQUES', 1166)
E         + NOM,PRENOM,MONTANT

test_TP.py:152: AssertionError
_____________________________________ test_Q15_req _____________________________________

    def test_Q15_req ():
>       assert requete(sol_Q15_req) == requete(Q15_req)
E       AssertionError: assert [('SILLET', 'Jacques', 1166)] == []
E         Left contains one more item: ('SILLET', 'Jacques', 1166)
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)" == 'NOM,PRENOM,MONTANT'
E         - ('GARREAU', 'PAUL', 22)
E         + NOM,PRENOM,MONTANT

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
======================== 12 failed, 10 passed in 0.36s =========================
```

```
MODIFICATIONS EFFECTUEES SUR LE FICHIER RENDU
=============================================

--- prog.py.orig        2020-06-22 08:23:22.000000000 +0200
+++ prog.py     2020-06-24 14:55:36.000000000 +0200
@@ -14,8 +14,7 @@
 Q3_req = "select CLI_NOM, CLI_PRENOM from T_CLIENT where TIT_CODE = 'Mme.';"

 ## Question 4
-Q4_req = "select TIT_CODE, CLI_NOM, CLI_PRENOM from T_CLIENT where TIT_CODE = '
Mme.' or  TIT_CODE= 'Melle.';
-"
+Q4_req = "select TIT_CODE, CLI_NOM, CLI_PRENOM from T_CLIENT where TIT_CODE = '
Mme.' or  TIT_CODE= 'Melle.';"


 ## Question 5
```

```
NOM = "Baron"
Prenom = "Tanya"
Classe = "MPSI 2"
alpha="57"

## Question 1
Q1_req = "select TIT_CODE, CLI_NOM, CLI_PRENOM from T_CLIENT;"

## Question 2
Q2_req = "select count(CLI_NOM) from T_CLIENT;"
Q2_res = "92"

## Question 3
Q3_req = "select CLI_NOM, CLI_PRENOM from T_CLIENT where TIT_CODE = 'Mme.';"

## Question 4
Q4_req = "select TIT_CODE, CLI_NOM, CLI_PRENOM from T_CLIENT where TIT_CODE = 'M
me.' or  TIT_CODE= 'Melle.';
"


## Question 5
Q5_req = "select count(CLI_NOM) from T_CLIENT where TIT_CODE = 'Mme.' or  TIT_CO
DE= 'Melle.';"
Q5_res = "17"

## Question 6
Q6_req = "select CLI_NOM as NOM, CLI_PRENOM as PRENOM from T_CLIENT where TIT_CO
DE = 'Mme.' or  TIT_CODE= 'Melle.' order by CLI_NOM asc;"


## Question 7
Q7_req = "select CLI_NOM, TEL_NUMERO from T_CLIENT join T_TELEPHONE on T_TELEPHO
NE.CLI_ID = T_CLIENT.CLI_ID;"

## 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 length(CLI_NOM) from T_CLIENT group by CLI_NOM having count(CLI
_NOM)>1 ;"
Q9_res = "8 , 6"

## Question 10
Q10_req = "select avg(LIF_REMISE_POURCENT), avg(LIF_REMISE_MONTANT) from T_LIGNE
_FACTURE;"
Q10_res = "72.0  , 106.0"

## Question 11
Q11_req = "select max(LIF_REMISE_POURCENT), max(LIF_REMISE_MONTANT) from T_LIGNE
_FACTURE;"
Q11_res = "72,  106"

## Question 12
Q12_req = "select distinct FAC_ID as fac_id1 from T_LIGNE_FACTURE where LIF_REMI
SE_MONTANT = '106' or LIF_REMISE_POURCENT= '72';"


## Question 13
Q13_req = ""

## Question 14
Q14_req = ""


## Question 15
Q15_req = ""
```

```
Q15_res ="nom,prenom,montant"
```

```
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_belguidoum
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

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

=================================== FAILURES ===================================
_____________________________________ test_Q1_req _____________________________________

    def test_Q1_req ():
>       assert requete(sol_Q1_req) == requete(Q1_req)
E       AssertionError: assert [('DUPONT', '...', 'M.'), ...] == [('M.', 'DUPO..
. 'Paul'), ...]
E         At index 0 diff: ('DUPONT', 'Alain', 'M.') != ('M.', 'DUPONT', 'Alain'
)
E         Use -v to get the full diff

test_TP.py:98: AssertionError
_____________________________________ test_Q3_req _____________________________________

    def test_Q3_req ():
>       assert requete(sol_Q3_req) == requete(Q3_req)

test_TP.py:107:
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

req = "SELECT CLI_NOM, CLI_PRENOM FROM T_CLIENT WHERE TIT_CODE LIKE 'MME."

    def requete (req):
        conn = sqlite3.connect('../../bdd/hotel_'+convert(alpha)+'.db')
        c=conn.cursor()
>       c.execute(req)
E       sqlite3.OperationalError: unrecognized token: "'MME."

test_TP.py:25: OperationalError
_____________________________________ test_Q4_req _____________________________________

    def test_Q4_req ():
>       assert requete(sol_Q4_req) == requete(Q4_req)
E       AssertionError: assert [('DUHAMEL', ... 'Mme.'), ...] == []
E         Left contains 16 more items, first extra item: ('DUHAMEL', 'Evelyne',
'Melle.')
E         Use -v to get the full diff

test_TP.py:110: AssertionError
_____________________________________ test_Q5_req _____________________________________

    def test_Q5_req ():
>       assert requete(sol_Q5_req) == requete(Q5_req)
E       assert [(16,)] == []
E         Left contains one more item: (16,)
E         Use -v to get the full diff

test_TP.py:116: AssertionError
_____________________________________ test_Q6_req _____________________________________

    def test_Q6_req ():
>       assert requete(sol_Q6_req) == requete(Q6_req)
E       AssertionError: assert [('BOYER', 'M...velyne'), ...] == []
E         Left contains 16 more items, first extra item: ('BOYER', 'Martine')
```

```
E         Use -v to get the full diff

test_TP.py:119: AssertionError
_____________________________________ test_Q7_req _____________________________________

    def test_Q7_req ():
>       assert requete(sol_Q7_req) == requete(Q7_req)
E       AssertionError: assert [('DUPONT', '...-92-21'), ...] == []
E         Left contains 111 more items, first extra item: ('DUPONT', '01-45-42-5
6-63')
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',)] == []
E         Left contains one more item: ('MARTIN',)
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)] == []
E         Left contains one more item: ('MARTIN', 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 '(74.0, 108.0)' == ''
E         - (74.0, 108.0)

test_TP.py:131: AssertionError
_____________________________________ test_Q10_req _____________________________________

    def test_Q10_req ():
>       assert requete(sol_Q10_req) == requete(Q10_req)
E       assert [(74.0, 108.0)] == []
E         Left contains one more item: (74.0, 108.0)
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 '(74.0, 108)' == ''
E         - (74.0, 108)

test_TP.py:137: AssertionError
_____________________________________ test_Q11_req _____________________________________

    def test_Q11_req ():
>       assert requete(sol_Q11_req) == requete(Q11_req)
E       assert [(74.0, 108)] == []
E         Left contains one more item: (74.0, 108)
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,), ...), (27,), ...] == []
E         Left contains 358 more items, first extra item: (1,)
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,), (3,), ...,), (7,), ...] == []
E         Left contains 91 more items, first extra item: (1,)
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', 1296)" == 'NOM,PRENOM,MONTANT'
E         - ('MEDARD', 'JACQUES', 1296)
E         + NOM,PRENOM,MONTANT

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', 1296)] == []
E         Left contains one more item: ('MEDARD', 'Jacques', 1296)
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)" == 'NOM,PRENOM,MONTANT'
E         - ('GARREAU', 'PAUL', 22)
E         + NOM,PRENOM,MONTANT

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
======================== 18 failed, 4 passed in 0.33s ========================
```

```
NOM = "Belguidoum"
Prenom = "Amin"
Classe = "mpsi2"
alpha="59"

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

## Question 2
Q2_req = "SELECT COUNT(*)  FROM T_CLIENT"
Q2_res = "91"

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

## Question 4
Q4_req = ""


## Question 5
Q5_req = ""
Q5_res = "16"

## Question 6
Q6_req = ""


## Question 7
Q7_req = ""

## Question 8
Q8_req = ""

## Question 9
Q9_req = ""
Q9_res = ""

## Question 10
Q10_req = ""
Q10_res = ""

## Question 11
Q11_req = ""
Q11_res = ""

## Question 12
Q12_req = ""


## Question 13
Q13_req = ""

## Question 14
Q14_req = ""


## Question 15
Q15_req = ""
Q15_res ="nom,prenom,montant"
```

```
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_ben_maamar
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

test_TP.py ....F...FF.F.F.FF.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..
.Annick'), ...]
E         At index 0 diff: ('DUHAMEL', 'Evelyne', 'Melle.') != ('BOYER', 'Martin
e')
E         Left contains 2 more items, first extra item: ('LEAL', 'Jany', '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 [('DUBOIS', '...-29-29'), ...] == [('BOUVIER', ..
.-92-21'), ...]
E         At index 0 diff: ('DUBOIS', '02-41-58-89-52') != ('BOUVIER', '06-11-86
-78-89')
E         Right contains 42 more items, first extra item: ('CHAMBON', '05-59-03-
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 [('BENATTAR',), ('MARTIN',)] == [('MARTIN', '...'
, 'Bernard')]
E         At index 0 diff: ('BENATTAR',) != ('MARTIN', 'Marc')
E         Right contains 3 more items, first extra item: ('MARTIN', 'Jean-Pierre
')
E         Use -v to get the full diff

test_TP.py:125: AssertionError
_____________________________________ test_Q10_res _____________________________________

    def test_Q10_res ():
>       assert sol_Q10_res.upper() ==  Q10_res.upper()
E       assert '(95.0, 129.0)' == " '95','129'"
E         - (95.0, 129.0)
E         +  '95','129'

test_TP.py:131: AssertionError
_____________________________________ test_Q11_res _____________________________________

    def test_Q11_res ():
>       assert sol_Q11_res.upper() ==  Q11_res.upper()
E       assert '(95.0, 129)' == "'95','129'"
E         - (95.0, 129)
E         + '95','129'
```

```
test_TP.py:137: AssertionError
_____________________________________ test_Q12_req _____________________________________

    def test_Q12_req ():
>       assert requete(sol_Q12_req) == requete(Q12_req)
E       assert [(1,), (2,), ...), (26,), ...] == []
E         Left contains 378 more items, first extra item: (1,)
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 [(2,), (3,), ...,), (7,), ...] == []
E         Left contains 87 more items, first extra item: (2,)
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 "('SILLET', 'JACQUES', 1419)" == 'NOM,PRENOM,MONTANT'
E         - ('SILLET', 'JACQUES', 1419)
E         + NOM,PRENOM,MONTANT

test_TP.py:152: AssertionError
_____________________________________ test_Q15_req _____________________________________

    def test_Q15_req ():
>       assert requete(sol_Q15_req) == requete(Q15_req)
E       AssertionError: assert [('SILLET', 'Jacques', 1419)] == []
E         Left contains one more item: ('SILLET', 'Jacques', 1419)
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)" == 'NOM,PRENOM,MONTANT'
E         - ('GARREAU', 'PAUL', 22)
E         + NOM,PRENOM,MONTANT

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
======================== 11 failed, 11 passed in 0.39s =========================
```

```
NOM = "Benmaamar"
Prenom = "Bayane"
Classe = "MPSI2"
alpha="80"

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

## Question 2
Q2_req = "SELECT COUNT (*) from (SELECT DISTINCT CLI_ID FROM T_CLIENT)"
Q2_res = "87"

## 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 FROM T_CLIENT WHERE TIT_CODE='Mme.'"


## Question 5
Q5_req = "SELECT COUNT (*) FROM T_CLIENT WHERE TIT_CODE= 'Mme.' OR TIT_CODE='Mel
le.'"
Q5_res = "15"

## 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 T_CLIENT.CLI_NOM,T_TELEPHONE.TEL_NUMERO FROM T_CLIENT JOIN T_TE
LEPHONE ON T_CLIENT.CLI_ID=T_TELEPHONE.CLI_ID"

## Question 8
Q8_req = "SELECT CLI_NOM,CLI_PRENOM from T_CLIENT JOIN (SELECT CLI_NOM as nom, C
OUNT(CLI_NOM) as nb FROM T_CLIENT GROUP BY CLI_NOM) ON T_CLIENT.CLI_NOM=nom WHER
E nb>1"

## Question 9
Q9_req = "SELECT CLI_NOM,nb from (SELECT CLI_NOM,COUNT(CLI_NOM) as nb FROM T_CLI
ENT GROUP BY CLI_NOM) WHERE nb>1"
Q9_res = " 'BENATTAR 2 ', 'MARTIN 3'"

## Question 10
Q10_req = "SELECT avg(LIF_REMISE_POURCENT),avg(LIF_REMISE_MONTANT) FROM T_LIGNE_
FACTURE"
Q10_res = " '95','129'"

## Question 11
Q11_req = "SELECT max(LIF_REMISE_POURCENT),max(LIF_REMISE_MONTANT) FROM T_LIGNE_
FACTURE"
Q11_res = "'95','129'"

## Question 12
Q12_req = ""


## Question 13
Q13_req = ""

## Question 14
Q14_req = ""


## Question 15
Q15_req = ""
Q15_res ="nom,prenom,montant"
```

```
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_bernhard
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

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

=================================== FAILURES ===================================
_____________________________________ test_Q1_req _____________________________________

    def test_Q1_req ():
>       assert requete(sol_Q1_req) == requete(Q1_req)
E       AssertionError: assert [('DUPONT', '...', 'M.'), ...] == [('M.', 'DUPO..
. 'Paul'), ...]
E         At index 0 diff: ('DUPONT', 'Alain', 'M.') != ('M.', 'DUPONT', 'Alain'
)
E         Use -v to get the full diff

test_TP.py:98: AssertionError
_____________________________________ test_Q4_req _____________________________________

    def test_Q4_req ():
>       assert requete(sol_Q4_req) == requete(Q4_req)
E       AssertionError: assert [('DUHAMEL', ... 'Mme.'), ...] == [('Melle.', '..
.onique'), ...]
E         At index 0 diff: ('DUHAMEL', 'Evelyne', 'Melle.') != ('Melle.', 'DUHAM
EL', 'Evelyne')
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', '...-52-56'), ...] == [('DUPONT', '..
.-43-21'), ...]
E         At index 2 diff: ('DREYFUS', '01-51-58-52-50') != ('DUPONT', '01-44-28
-52-50')
E         Right contains 49 more items, first extra item: ('GAL', '04-90-78-10-6
8')
E         Use -v to get the full diff

test_TP.py:122: AssertionError
_____________________________________ test_Q10_res _____________________________________

    def test_Q10_res ():
>       assert sol_Q10_res.upper() ==  Q10_res.upper()
E       AssertionError: assert '(54.0, 88.0)' == '54.0, 88.0'
E         - (54.0, 88.0)
E         ? -          -
E         + 54.0, 88.0

test_TP.py:131: AssertionError
_____________________________________ test_Q11_res _____________________________________

    def test_Q11_res ():
>       assert sol_Q11_res.upper() ==  Q11_res.upper()
E       AssertionError: assert '(54.0, 88)' == '54, 88'
E         - (54.0, 88)
E         ? -  --    -
E         + 54, 88
```

```
test_TP.py:137: AssertionError
_____________________________________ test_Q12_req _____________________________________

    def test_Q12_req ():
>       assert requete(sol_Q12_req) == requete(Q12_req)
E       assert [(1,), (2,), ...), (26,), ...] == []
E         Left contains 366 more items, first extra item: (1,)
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,), (2,), ...,), (7,), ...] == []
E         Left contains 94 more items, first extra item: (1,)
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 "('DUQUESNAY'...CQUES', 1056)" == 'NOM,PRENOM,MONTANT'
E         - ('DUQUESNAY', 'JACQUES', 1056)
E         + NOM,PRENOM,MONTANT

test_TP.py:152: AssertionError
_____________________________________ test_Q15_req _____________________________________

    def test_Q15_req ():
>       assert requete(sol_Q15_req) == requete(Q15_req)
E       AssertionError: assert [('DUQUESNAY'...cques', 1056)] == []
E         Left contains one more item: ('DUQUESNAY', 'Jacques', 1056)
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)" == 'NOM,PRENOM,MONTANT'
E         - ('GARREAU', 'PAUL', 22)
E         + NOM,PRENOM,MONTANT

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
======================== 11 failed, 11 passed in 0.39s =========================
```

```
NOM = "BERNHARD"
Prenom = "Théophane"
Classe = "MPSI2"
alpha="39"

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

## Question 2
Q2_req = "SELECT COUNT(*) FROM T_CLIENT"
Q2_res = "94"

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

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


## Question 5
Q5_req = "SELECT count(*) FROM T_CLIENT WHERE TIT_CODE='Mme.' OR TIT_CODE='Melle
.'"
Q5_res = "16"

## Question 6
Q6_req = "SELECT CLI_NOM AS 'Noms', CLI_PRENOM AS 'Prénoms' FROM T_CLIENT WHERE
TIT_CODE='Mme.' OR TIT_CODE='Melle.' ORDER BY CLI_NOM ASC, CLI_PRENOM ASC"


## Question 7
Q7_req = "SELECT T_CLIENT.CLI_NOM, T_TELEPHONE.TEL_NUMERO FROM T_CLIENT JOIN T_T
ELEPHONE ON T_CLIENT.CLI_ID=T_TELEPHONE.CLI_ID"

## Question 8
Q8_req = "SELECT CLI_NOM FROM (SELECT CLI_NOM, COUNT(CLI_NOM) AS fr FROM T_CLIEN
T GROUP BY CLI_NOM) WHERE fr>=2"

## Question 9
Q9_req = "SELECT CLI_NOM, fr FROM (SELECT CLI_NOM, COUNT(CLI_NOM) AS fr FROM T_C
LIENT GROUP BY CLI_NOM) WHERE fr>=2"
Q9_res = "BENATTAR 2 fois, MARTIN 3 fois"

## Question 10
Q10_req = "SELECT AVG(LIF_REMISE_POURCENT), AVG(LIF_REMISE_MONTANT) FROM T_LIGNE
_FACTURE"
Q10_res = "54.0, 88.0"

## Question 11
Q11_req = "SELECT max(LIF_REMISE_POURCENT), max(LIF_REMISE_MONTANT) FROM T_LIGNE
_FACTURE"
Q11_res = "54, 88"

## Question 12
Q12_req = ""


## Question 13
Q13_req = ""

## Question 14
Q14_req = ""


## Question 15
Q15_req = ""
Q15_res ="nom,prenom,montant"
```

```
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_berton
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

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

=================================== FAILURES ===================================
_____________________________________ test_Q4_req _____________________________________

    def test_Q4_req ():
>       assert requete(sol_Q4_req) == requete(Q4_req)
E       AssertionError: assert [('DAUMIER', ... 'Mme.'), ...] == [('BOYER', 'M..
. 'Mme.'), ...]
E         At index 0 diff: ('DAUMIER', 'Amélie', 'Melle.') != ('BOYER', 'Martine
', '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', '...-52-56'), ...] == [('DUPONT', '..
.-52-50'), ...]
E         At index 2 diff: ('DUBOIS', '02-41-58-89-52') != ('DUPONT', '01-44-28-
52-50')
E         Right contains 14109 more items, first extra item: ('DUPONT', '04-91-5
2-51-52')
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 [('BENATTAR',), ('MARTIN',)] == []
E         Left contains 2 more items, first extra item: ('BENATTAR',)
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 [('BENATTAR',...('MARTIN', 2)] == [(1, 'AIACH')..
.AVEREL'), ...]
E         At index 0 diff: ('BENATTAR', 2) != (1, 'AIACH')
E         Right contains 86 more items, first extra item: (1, 'AUZENAT')
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 '(80.0, 114.0)' == 'MOYENNE REMI...NTANT : 114.0'
E         - (80.0, 114.0)
E         + MOYENNE REMISE POURCENTAGE : 80.0, REMISE MONTANT : 114.0

test_TP.py:131: AssertionError
```

```
_____________________________________ test_Q11_res _____________________________________

    def test_Q11_res ():
>       assert sol_Q11_res.upper() ==  Q11_res.upper()
E       AssertionError: assert '(80.0, 114)' == 'MAX REMISE P...MONTANT : 114'
E         - (80.0, 114)
E         + MAX REMISE POURCENTAGE : 80, REMISE MONTANT : 114

test_TP.py:137: 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 925 more items, first extra item: (691,)
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,), (2,), ...,), (6,), ...] == [(1,)]
E         Left contains 89 more items, first extra item: (2,)
E         Use -v to get the full diff

test_TP.py:146: AssertionError
_____________________________________ test_Q14_req _____________________________________

    def test_Q14_req ():
>       assert requete(sol_Q14_req) == requete(Q14_req)
E       assert [] == [(1,)]
E         Right contains one more item: (1,)
E         Use -v to get the full diff

test_TP.py:149: AssertionError
_____________________________________ test_Q15_res _____________________________________

    def test_Q15_res ():
>       assert sol_Q15_res.upper() ==  Q15_res.upper()
E       assert "('MEDARD', 'JACQUES', 1368)" == 'NOM,PRENOM,MONTANT'
E         - ('MEDARD', 'JACQUES', 1368)
E         + NOM,PRENOM,MONTANT

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', 1368)] == []
E         Left contains one more item: ('MEDARD', 'Jacques', 1368)
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)" == 'NOM,PRENOM,MONTANT'
E         - ('GARREAU', 'PAUL', 22)
E         + NOM,PRENOM,MONTANT

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
========================== 13 failed, 9 passed in 0.35s ==========================
```

```
NOM = "BERTON"
Prenom = "Margot"
Classe = "MPSI 2"
alpha="65"

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

## Question 2
Q2_req = """SELECT COUNT(CLI_ID)
            FROM T_CLIENT;"""
Q2_res = "90"

## 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(CLI_ID)
            FROM T_CLIENT
            WHERE TIT_CODE = "Mme." OR TIT_CODE = "Melle.";"""
Q5_res = "13"

## Question 6
Q6_req = """SELECT CLI_NOM AS Noms,CLI_PRENOM AS Prénoms
            FROM T_CLIENT
            WHERE TIT_CODE = "Mme." or TIT_CODE = "Melle."
            ORDER BY Noms ASC;"""


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

## Question 8
Q8_req = ""

## Question 9
Q9_req = """SELECT COUNT(*) AS "Nombre d'occurences",CLI_NOM
            FROM T_CLIENT
            GROUP BY CLI_NOM;"""
Q9_res = "1 pour tous, sauf pour Martin et Benattar : 2"

## Question 10
Q10_req = """SELECT AVG(LIF_REMISE_POURCENT),AVG(LIF_REMISE_MONTANT)
             FROM T_LIGNE_FACTURE;"""
Q10_res = "Moyenne remise pourcentage : 80.0, remise montant : 114.0"

## Question 11
Q11_req = """SELECT MAX(LIF_REMISE_POURCENT),MAX(LIF_REMISE_MONTANT)
             FROM T_LIGNE_FACTURE;"""
Q11_res = "Max remise pourcentage : 80, remise montant : 114"

## Question 12
```

```
Q12_req = """SELECT FAC_ID AS fac_id1
             FROM T_LIGNE_FACTURE
             WHERE LIF_REMISE_MONTANT IS NOT NULL
                   OR LIF_REMISE_POURCENT IS NOT NULL;"""


## Question 13
Q13_req = """SELECT CLI_ID
             FROM T_FACTURE
             WHERE T_FACTURE.FAC_ID = (SELECT FAC_ID AS fac_id1
                                                                    FROM T_LIGNE_FACT
URE
                                                                    WHERE LIF_REMISE_
MONTANT IS NOT NULL
                                                                            OR LIF_RE
MISE_POURCENT IS NOT NULL)
;"""

## Question 14
Q14_req = """SELECT CLI_ID
             FROM T_FACTURE
             WHERE T_FACTURE.FAC_ID = (SELECT FAC_ID AS fac_id1
                                                                    FROM T_LIGNE_FACT
URE
                                                                    WHERE LIF_REMISE_
MONTANT IS NULL
                                                                            AND LIF_R
EMISE_POURCENT IS NULL)"""


## Question 15
Q15_req = ""
Q15_res ="nom,prenom,montant"
```

```
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_besson
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

test_TP.py .........FFF.F.FFFFFFF                                        [100%]

=================================== FAILURES ===================================
_________________________________ test_Q8_req __________________________________

    def test_Q8_req ():
>       assert requete(sol_Q8_req) == requete(Q8_req)

test_TP.py:125: 
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

req = 'SELECT CLI_NOM from T_CLIENT group by having count(CLI_NOM)>1'

    def requete (req):
        conn = sqlite3.connect('../../bdd/hotel_'+convert(alpha)+'.db')
        c=conn.cursor()
>       c.execute(req)
E       sqlite3.OperationalError: near "having": syntax error

test_TP.py:25: OperationalError
_________________________________ test_Q9_req __________________________________

    def test_Q9_req ():
>       assert requete(sol_Q9_req) == requete(Q9_req)

test_TP.py:128: 
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

req = 'SELECT CLI_NOM,count(CLI_NOM) from T_CLIENT group by having count(CLI_NOM
)>1'

    def requete (req):
        conn = sqlite3.connect('../../bdd/hotel_'+convert(alpha)+'.db')
        c=conn.cursor()
>       c.execute(req)
E       sqlite3.OperationalError: near "having": syntax error

test_TP.py:25: OperationalError
_________________________________ test_Q10_res _________________________________

    def test_Q10_res ():
>       assert sol_Q10_res.upper() ==  Q10_res.upper()
E       AssertionError: assert '(51.0, 85.0)' == 'MOYENNE POUR... REMISE: 85.0'
E         - (51.0, 85.0)
E         + MOYENNE POURCENT: 51.0 ET MOYENNE REMISE: 85.0

test_TP.py:131: AssertionError
_________________________________ test_Q11_res _________________________________

    def test_Q11_res ():
>       assert sol_Q11_res.upper() ==  Q11_res.upper()
E       AssertionError: assert '(51.0, 85)' == 'MAX POURECNT...AX REMISE: 85'
E         - (51.0, 85)
E         + MAX POURECNTAGE: 51 ET MAX REMISE: 85

test_TP.py:137: 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 894 more items, first extra item: (712,)
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)

test_TP.py:146:
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

req = 'SELECT T_facture.CLI_ID from T_FACTURE join T_LIGNE_FACTURE on T_LIGNE_FA
CTURE;FAC_ID=T_FACTURE.FAC_ID WHERE LIF_REMISE_MONTANT>0 or LIF_REMISE_POURCENT>
0'

    def requete (req):
        conn = sqlite3.connect('../../bdd/hotel_'+convert(alpha)+'.db')
        c=conn.cursor()
>       c.execute(req)
E       sqlite3.OperationalError: no such column: T_LIGNE_FACTURE

test_TP.py:25: OperationalError
_____________________________________ test_Q14_req _____________________________________

    def test_Q14_req ():
>       assert requete(sol_Q14_req) == requete(Q14_req)

test_TP.py:149:
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

req = 'SELECT T_FACTURE.CLI_ID FROM T_FACTURE EXCEPT(SELECT T_facture.CLI_ID fro
m T_FACTURE join T_LIGNE_FACTURE on T_LIGNE_FACTURE;FAC_ID=T_FACTURE.FAC_ID WHER
E LIF_REMISE_MONTANT>0 or LIF_REMISE_POURCENT>0) '

    def requete (req):
        conn = sqlite3.connect('../../bdd/hotel_'+convert(alpha)+'.db')
        c=conn.cursor()
>       c.execute(req)
E       sqlite3.OperationalError: near "(": syntax error

test_TP.py:25: OperationalError
_____________________________________ test_Q15_res _____________________________________

    def test_Q15_res ():
>       assert sol_Q15_res.upper() ==  Q15_res.upper()
E       assert "('SILLET', 'JACQUES', 935)" == 'NOM,PRENOM,MONTANT'
E         - ('SILLET', 'JACQUES', 935)
E         + NOM,PRENOM,MONTANT

test_TP.py:152: AssertionError
_____________________________________ test_Q15_req _____________________________________

    def test_Q15_req ():
>       assert requete(sol_Q15_req) == requete(Q15_req)
E       AssertionError: assert [('SILLET', 'Jacques', 935)] == []
E         Left contains one more item: ('SILLET', 'Jacques', 935)
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)" == 'NOM,PRENOM,MONTANT'
E         - ('GARREAU', 'PAUL', 22)
E         + NOM,PRENOM,MONTANT

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
======================== 11 failed, 11 passed in 0.38s =========================

MODIFICATIONS EFFECTUEES SUR LE FICHIER RENDU
=============================================

--- prog.py.orig        2020-06-22 08:23:31.000000000 +0200
+++ prog.py     2020-06-24 14:55:47.000000000 +0200
@@ -4,8 +4,7 @@
 alpha="36"

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

 ## Question 2
 Q2_req = "SELECT COUNT(*) FROM T_CLIENT"
@@ -52,8 +51,7 @@
 Q13_req = "SELECT T_facture.CLI_ID from T_FACTURE join T_LIGNE_FACTURE on T_LIG
NE_FACTURE;FAC_ID=T_FACTURE.FAC_ID WHERE LIF_REMISE_MONTANT>0 or LIF_REMISE_POUR
CENT>0"

 ## Question 14
-Q14_req = "SELECT T_FACTURE.CLI_ID FROM T_FACTURE
-EXCEPT(SELECT T_facture.CLI_ID from T_FACTURE join T_LIGNE_FACTURE on T_LIGNE_F
ACTURE;FAC_ID=T_FACTURE.FAC_ID WHERE LIF_REMISE_MONTANT>0 or LIF_REMISE_POURCENT
>0) "
+Q14_req = "SELECT T_FACTURE.CLI_ID FROM T_FACTURE EXCEPT(SELECT T_facture.CLI_I
D from T_FACTURE join T_LIGNE_FACTURE on T_LIGNE_FACTURE;FAC_ID=T_FACTURE.FAC_ID
 WHERE LIF_REMISE_MONTANT>0 or LIF_REMISE_POURCENT>0) "


 ## Question 15
```

```
NOM = "BESSON"
Prenom = "Mathis"
Classe = "MPSI2"
alpha="36"

## 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 = "91"

## 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
.' or TIT_CODE='Melle.'"


## Question 5
Q5_req = "SELECT count(*) FROM T_CLIENT where TIT_CODE='Mme.' or TIT_CODE='Melle
.'"
Q5_res = "15"

## Question 6
Q6_req = "SELECT CLI_NOM as Noms, CLI_PRENOM as Prénoms FROM T_CLIENT where TIT_
CODE='Mme.' or TIT_CODE='Melle.' ORDER BY Noms"


## Question 7
Q7_req = "SELECT T_CLIENT.CLI_NOM as Noms, T_TELEPHONE.TEL_NUMERO from T_CLIENT
join T_TELEPHONE on T_TELEPHONE.CLI_ID=T_CLIENT.CLI_ID WHERE T_TELEPHONE.TYP_COD
E='TEL'"

## Question 8
Q8_req = "SELECT CLI_NOM from T_CLIENT group by having count(CLI_NOM)>1"

## Question 9
Q9_req = "SELECT CLI_NOM,count(CLI_NOM) from T_CLIENT group by having count(CLI_
NOM)>1"
Q9_res = "BENATTAR:2 et MARTIN:2"

## Question 10
Q10_req = "SELECT avg(LIF_remise_pourcent) as pourcent_moy, avg(LIF_remise_monta
nt) as remise_moy from T_LIGNE_FACTURE"
Q10_res = "moyenne pourcent: 51.0 et moyenne remise: 85.0"

## Question 11
Q11_req = "SELECT max(LIF_remise_pourcent),max(LIF_remise_montant) FROM T_LIGNE_
FACTURE"
Q11_res = "max pourecntage: 51 et max remise: 85"

## Question 12
Q12_req = "SELECT FAC_ID as fact_id1 from T_LIGNE_FACTURE WHERE LIF_REMISE_MONTA
NT>0 or LIF_REMISE_POURCENT>0"


## Question 13
Q13_req = "SELECT T_facture.CLI_ID from T_FACTURE join T_LIGNE_FACTURE on T_LIGN
E_FACTURE;FAC_ID=T_FACTURE.FAC_ID WHERE LIF_REMISE_MONTANT>0 or LIF_REMISE_POURC
ENT>0"

## Question 14
Q14_req = "SELECT T_FACTURE.CLI_ID FROM T_FACTURE
EXCEPT(SELECT T_facture.CLI_ID from T_FACTURE join T_LIGNE_FACTURE on T_LIGNE_FA
CTURE;FAC_ID=T_FACTURE.FAC_ID WHERE LIF_REMISE_MONTANT>0 or LIF_REMISE_POURCENT>
```

```
0) "


## Question 15
Q15_req = ""
Q15_res ="nom,prenom,montant"
```

```
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_bonnefoy
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

test_TP.py F...F...F.FF.F.FFFFFFF                                        [100%]

=================================== FAILURES ===================================
_____________________________________ test_Q1_req _____________________________________

    def test_Q1_req ():
>       assert requete(sol_Q1_req) == requete(Q1_req)
E       AssertionError: assert [('DUPONT', '...', 'M.'), ...] == [('M.', 'DUPO..
.'Alain'), ...]
E         At index 0 diff: ('DUPONT', 'Alain', 'M.') != ('M.', 'DUPONT', 'Alain'
)
E         Use -v to get the full diff

test_TP.py:98: AssertionError
_____________________________________ test_Q4_req _____________________________________

    def test_Q4_req ():
>       assert requete(sol_Q4_req) == requete(Q4_req)
E       AssertionError: assert [('DUHAMEL', ... 'Mme.'), ...] == [('Melle.', '..
.onique'), ...]
E         At index 0 diff: ('DUHAMEL', 'Evelyne', 'Melle.') != ('Melle.', 'DUHAM
EL', 'Evelyne')
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', '..
.-52-50'), ...]
E         At index 2 diff: ('DUBOIS', '02-41-58-89-52') != ('DUPONT', '01-44-28-
52-50')
E         Right contains 50 more items, first extra item: ('AIACH', '04-91-52-51
-52')
E         Use -v to get the full diff

test_TP.py:122: AssertionError
_____________________________________ test_Q9_req _____________________________________

    def test_Q9_req ():
>       assert requete(sol_Q9_req) == requete(Q9_req)
E       AssertionError: assert [('BENATTAR',...('MARTIN', 3)] == [(2,)]
E         At index 0 diff: ('BENATTAR', 2) != (2,)
E         Left contains one more item: ('MARTIN', 3)
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 '(27.0, 61.0)' == '27 ET 61'
E         - (27.0, 61.0)
E         + 27 ET 61
```

```
test_TP.py:131: AssertionError
_____________________________________ test_Q11_res _____________________________________

    def test_Q11_res ():
>       assert sol_Q11_res.upper() ==  Q11_res.upper()
E       AssertionError: assert '(27.0, 61)' == '27 ET 61'
E         - (27.0, 61)
E         + 27 ET 61

test_TP.py:137: AssertionError
_____________________________________ test_Q12_req _____________________________________

    def test_Q12_req ():
>       assert requete(sol_Q12_req) == requete(Q12_req)
E       assert [(1,), (2,), ...), (27,), ...] == [(1,), (3,), ...,), (2,), ...]
E         At index 1 diff: (2,) != (3,)
E         Right contains 848 more items, first extra item: (668,)
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,), (2,), ...,), (6,), ...] == [(1,), (1,), ...,), (1,), ...]
E         At index 1 diff: (2,) != (1,)
E         Right contains 1052 more items, first extra item: (10,)
E         Use -v to get the full diff

test_TP.py:146: AssertionError
_____________________________________ test_Q14_req _____________________________________

    def test_Q14_req ():
>       assert requete(sol_Q14_req) == requete(Q14_req)
E       assert [] == [(1,), (1,), ...,), (1,), ...]
E         Right contains 1682 more items, first extra item: (1,)
E         Use -v to get the full diff

test_TP.py:149: AssertionError
_____________________________________ test_Q15_res _____________________________________

    def test_Q15_res ():
>       assert sol_Q15_res.upper() ==  Q15_res.upper()
E       assert "('SILLET', 'JACQUES', 671)" == 'NOM,PRENOM,MONTANT'
E         - ('SILLET', 'JACQUES', 671)
E         + NOM,PRENOM,MONTANT

test_TP.py:152: AssertionError
_____________________________________ test_Q15_req _____________________________________

    def test_Q15_req ():
>       assert requete(sol_Q15_req) == requete(Q15_req)
E       AssertionError: assert [('SILLET', 'Jacques', 671)] == []
E         Left contains one more item: ('SILLET', 'Jacques', 671)
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)" == 'NOM,PRENOM,MONTANT'
E         - ('GARREAU', 'PAUL', 22)
E         + NOM,PRENOM,MONTANT

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
========================== 13 failed, 9 passed in 0.42s ==========================
```

```
NOM = "bonnefoy"
Prenom = "léo"
Classe = "mpsi2"
alpha="12"

## Question 1
Q1_req = "select TIT_CODE,CLI_NOM,CLI_PRENOM from T_CLIENT"

## Question 2
Q2_req = "select count(*) from T_CLIENT"
Q2_res = "97"

## Question 3
Q3_req = "select CLI_NOM,CLI_PRENOM from T_CLIENT where TIT_CODE='Mme.'"

## Question 4
Q4_req = "select TIT_CODE,CLI_NOM,CLI_PRENOM from T_CLIENT where TIT_CODE='Mme.'
 or TIT_CODE='Melle.'"


## Question 5
Q5_req = "select count(*) from T_CLIENT where TIT_CODE='Mme.' or TIT_CODE='Melle
.'"
Q5_res = "17"

## Question 6
Q6_req = "select CLI_NOM as Noms,CLI_PRENOM  as Prenoms from T_CLIENT where TIT_
CODE='Mme.' or TIT_CODE='Melle.' group by Noms"


## Question 7
Q7_req = "select CLI_NOM as Noms,TEL_NUMERO as nb_telephone from T_CLIENT,T_TELE
PHONE where T_CLIENT.CLI_ID=T_TELEPHONE.CLI_ID"

## Question 8
Q8_req = "select CLI_NOM as Noms from T_CLIENT group by CLI_NOM having count(Nom
s)>1"

## Question 9
Q9_req = "select count(*) from ( select CLI_NOM as Noms from T_CLIENT group by C
LI_NOM having count(Noms)>1)"
Q9_res = "2select avg(LIF_REMISE_POURCENT) as val_moyenne_remise , avg(LIF_REMIS
E_MONTANT) as val_moyenne_montant from T_LIGNE_FACTURE"

## Question 10
Q10_req = "select avg(LIF_REMISE_POURCENT) as val_moyenne_remise , avg(LIF_REMIS
E_MONTANT) as val_moyenne_montant from T_LIGNE_FACTURE"
Q10_res = "27 et 61"

## Question 11
Q11_req = "select max(LIF_REMISE_POURCENT) as val_max_remise , max(LIF_REMISE_MO
NTANT) as val_max_montant from T_LIGNE_FACTURE"
Q11_res = "27 et 61"

## Question 12
Q12_req = "select FAC_ID as fac_id1 from T_LIGNE_FACTURE where LIF_REMISE_POURCE
NT<>'NULL' or LIF_REMISE_MONTANT <> 'NULL'"


## Question 13
Q13_req = "select  CLI_ID from T_FACTURE,(select FAC_ID as fac_id1 from T_LIGNE_
FACTURE where LIF_REMISE_POURCENT<>'NULL' or LIF_REMISE_MONTANT <> 'NULL')where
fac_id1=FAC_ID "

## Question 14
Q14_req = "select  CLI_ID from T_FACTURE,(select FAC_ID as fac_id2 from T_LIGNE_
FACTURE EXCEPT select FAC_ID as fac_id1 from T_LIGNE_FACTURE where LIF_REMISE_PO
URCENT<>'NULL' or LIF_REMISE_MONTANT <> 'NULL') where fac_id2=FAC_ID"
```

```
## Question 15
Q15_req = ""
Q15_res ="nom,prenom,montant"
```

```
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_bramas
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

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

=================================== FAILURES ===================================
_____________________________________ test_Q1_req _____________________________________

    def test_Q1_req ():
>       assert requete(sol_Q1_req) == requete(Q1_req)
E       AssertionError: assert [('DUPONT', '...Melle.'), ...] == [('M.', 'DUPO..
.velyne'), ...]
E         At index 0 diff: ('DUPONT', 'Alain', 'M.') != ('M.', 'DUPONT', 'Alain'
)
E         Use -v to get the full diff

test_TP.py:98: AssertionError
_____________________________________ test_Q4_req _____________________________________

    def test_Q4_req ():
>       assert requete(sol_Q4_req) == requete(Q4_req)
E       AssertionError: assert [('DUHAMEL', ... 'Mme.'), ...] == [('Melle.', '..
.onique'), ...]
E         At index 0 diff: ('DUHAMEL', 'Evelyne', 'Melle.') != ('Melle.', 'DUHAM
EL', 'Evelyne')
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 0 diff: ('DUPONT', '01-45-42-56-63') != ('DUPONT', 'Alain', '
01-45-42-56-63')
E         Right contains 43 more items, first extra item: ('GAL', 'Fabrice', '04
-90-78-10-68')
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',)] == [('AIACH', 'A...édéric'), ...]
E         At index 0 diff: ('MARTIN',) != ('AIACH', 'Alexandre')
E         Right contains 84 more items, first extra item: ('ALBERT', 'Christian'
)
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)] == [(1, 'AIACH')...AVEREL'), ...]
E         At index 0 diff: ('MARTIN', 2) != (1, 'AIACH')
E         Right contains 84 more items, first extra item: (1, 'ALBERT')
```

```
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 '(97.0, 131.0)' == '97 ; 131.0'
E         - (97.0, 131.0)
E         + 97 ; 131.0

test_TP.py:131: AssertionError
_____________________________________ test_Q11_res _____________________________________

    def test_Q11_res ():
>       assert sol_Q11_res.upper() ==  Q11_res.upper()
E       AssertionError: assert '(97.0, 131)' == '97; 131'
E         - (97.0, 131)
E         + 97; 131

test_TP.py:137: AssertionError
_____________________________________ test_Q12_req _____________________________________

    def test_Q12_req ():
>       assert requete(sol_Q12_req) == requete(Q12_req)
E       assert [(1,), (2,), ...), (26,), ...] == [(3,), (4,), ...), (51,), ...]
E         At index 0 diff: (1,) != (3,)
E         Left contains 195 more items, first extra item: (1166,)
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,), (4,), ...,), (8,), ...]
E         At index 54 diff: (64,) != (65,)
E         Left contains one more item: (100,)
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 "('SILLET', 'JACQUES', 1441)" == 'SILLET,JACQUES,1441'
E         - ('SILLET', 'JACQUES', 1441)
E         ? --      - --       - -    -
E         + SILLET,JACQUES,1441

test_TP.py:152: AssertionError
_____________________________________ test_Q15_req _____________________________________

    def test_Q15_req ():
>       assert requete(sol_Q15_req) == requete(Q15_req)
E       AssertionError: assert [('SILLET', 'Jacques', 1441)] == [(1441, 'SILLET'
, 'Jacques')]
E         At index 0 diff: ('SILLET', 'Jacques', 1441) != (1441, 'SILLET', 'Jacq
ues')
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)" == 'SILLET,JACQUES,1441'
E         - ('GARREAU', 'PAUL', 22)
```

```
E         + SILLET,JACQUES,1441

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)] == [(1441, 'SILLET', 'J
acques')]
E         At index 0 diff: ('GARREAU', 'Paul', 22) != (1441, 'SILLET', 'Jacques'
)
E         Use -v to get the full diff

test_TP.py:161: AssertionError
========================== 13 failed, 9 passed in 0.36s ==========================
```

```
NOM = "BRAMAS"
Prenom = "Timothe"
Classe = "Mpsi2"
alpha="82"

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

## Question 2
Q2_req = "SELECT count (*) as NB_clients FROM T_CLIENT"
Q2_res = "86"

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

## Question 4
Q4_req = "SELECT TIT_CODE, CLI_NOM, CLI_PRENOM FROM T_CLIENT WHERE TIT_CODE = ’M
me.’ or TIT_CODE=’Melle.’"


## Question 5
Q5_req = "SELECT count (*) as NB_clientes FROM (SELECT TIT_CODE, CLI_NOM, CLI_PR
ENOM FROM T_CLIENT WHERE TIT_CODE = ’Mme.’ or TIT_CODE=’Melle.’)"
Q5_res = "16"

## Question 6
Q6_req = "SELECT CLI_NOM as Noms, CLI_PRENOM as Prénoms FROM T_CLIENT WHERE TIT_
CODE = ’Mme.’ or TIT_CODE=’Melle.’ ORDER by CLI_NOM, CLI_PRENOM ASC"


## Question 7
Q7_req = "SELECT CLI_NOM, CLI_PRENOM, TEL_NUMERO FROM T_CLIENT, T_TELEPHONE WHER
E T_CLIENT.CLI_ID = T_TELEPHONE.CLI_ID"

## Question 8
Q8_req = "SELECT  CLI_NOM, CLI_PRENOM FROM T_CLIENT GROUP by CLI_NOM"

## Question 9
Q9_req = "SELECT  count(*), CLI_NOM FROM T_CLIENT GROUP by CLI_NOM"
Q9_res = "1"

## Question 10
Q10_req = "SELECT avg(LIF_REMISE_POURCENT) as moyenne_pourcentage, avg(LIF_REMIS
E_MONTANT) as moyenne_montant FROM T_LIGNE_FACTURE"
Q10_res = "97 ; 131.0"

## Question 11
Q11_req = "SELECT max(LIF_REMISE_POURCENT) as max_pourcentage, max(LIF_REMISE_MO
NTANT) as max_montant FROM T_LIGNE_FACTURE "
Q11_res = "97; 131"

## Question 12
Q12_req = "SELECT FAC_ID as fac_id1 FROM T_LIGNE_FACTURE WHERE LIF_REMISE_MONTAN
T >0 GROUP by FAC_ID"


## Question 13
Q13_req = "SELECT CLI_ID FROM T_LIGNE_FACTURE, T_FACTURE WHERE LIF_REMISE_MONTAN
T > 0 AND T_LIGNE_FACTURE.FAC_ID = T_FACTURE.FAC_ID GROUP by CLI_ID"

## Question 14
Q14_req = "SELECT CLI_ID FROM T_LIGNE_FACTURE, T_FACTURE WHERE LIF_REMISE_MONTAN
T= NULL AND T_LIGNE_FACTURE.FAC_ID = T_FACTURE.FAC_ID GROUP by CLI_ID"


## Question 15
Q15_req = "SELECT max(nb_remises)*131 as remise_totale, CLI_NOM, CLI_PRENOM FROM
 (SELECT nb_remises, CLI_ID, CLI_NOM, CLI_PRENOM FROM (SELECT CLI_ID as id_clien
```

```
t, LIF_REMISE_MONTANT, count() as nb_remises FROM T_LIGNE_FACTURE, T_FACTURE WHE
RE LIF_REMISE_MONTANT > 0 AND T_LIGNE_FACTURE.FAC_ID = T_FACTURE.FAC_ID GROUP by
 CLI_ID), T_CLIENT WHERE id_client = T_CLIENT.CLI_ID)"
Q15_res ="SILLET,Jacques,1441"
```

```
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_castres
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

test_TP.py .......FFF.F.F.F..FFF.                                        [100%]

================================== FAILURES ==================================
_________________________________ test_Q6_req __________________________________

    def test_Q6_req ():
>       assert requete(sol_Q6_req) == requete(Q6_req)

test_TP.py:119: 
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

req = "SELECT CLI_NOM as Noms, CLI_PRENOM as Prénoms from (SELECT CLI_NOM, CLI_P
RENOM, TIT_CODE from T_CLIENT where TIT_CODE='Mme. or TIT_CODE='Melle.') order b
y CLI_NOM ASC;"

    def requete (req):
        conn = sqlite3.connect('../../bdd/hotel_'+convert(alpha)+'.db')
        c=conn.cursor()
>       c.execute(req)
E       sqlite3.OperationalError: near "Melle": syntax error

test_TP.py:25: OperationalError
_________________________________ test_Q7_req __________________________________

    def test_Q7_req ():
>       assert requete(sol_Q7_req) == requete(Q7_req)
E       AssertionError: assert [('DUPONT', '...-92-21'), ...] == [('DUPONT', '..
.-52-50'), ...]
E         At index 2 diff: ('DUBOIS', '02-41-58-89-52') != ('DUPONT', '01-44-28-
52-50')
E         Right contains 51 more items, first extra item: ('GAL', '04-90-78-10-6
8')
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 [('BENATTAR',), ('MARTIN',)] == [('BENATTAR',...n
-Pierre', 3)]
E         At index 0 diff: ('BENATTAR',) != ('BENATTAR', 'Bernard', 2)
E         Use -v to get the full diff

test_TP.py:125: AssertionError
_________________________________ test_Q10_res _________________________________

    def test_Q10_res ():
>       assert sol_Q10_res.upper() ==  Q10_res.upper()
E       AssertionError: assert '(24.0, 58.0)' == 'POURCENT : 24, MONTANT : 58'
E         - (24.0, 58.0)
E         + POURCENT : 24, MONTANT : 58

test_TP.py:131: AssertionError
_________________________________ test_Q11_res _________________________________
```

```
    def test_Q11_res ():
>       assert sol_Q11_res.upper() ==  Q11_res.upper()
E       AssertionError: assert '(24.0, 58)' == 'POURCENT : 24, MONTANT : 58'
E         - (24.0, 58)
E         + POURCENT : 24, MONTANT : 58

test_TP.py:137: 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 848 more items, first extra item: (668,)
E         Use -v to get the full diff

test_TP.py:143: AssertionError
_____________________________________ test_Q15_res _____________________________________

    def test_Q15_res ():
>       assert sol_Q15_res.upper() ==  Q15_res.upper()
E       assert "('MEDARD', 'JACQUES', 696)" == 'NOM: THOMASS...,MONTANT : 20'
E         - ('MEDARD', 'JACQUES', 696)
E         + NOM: THOMASSE,PRENOM:JEAN-CLAUDE,MONTANT : 20

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', 696)] == [('THOMASSE',...-
Claude', 20)]
E         At index 0 diff: ('MEDARD', 'Jacques', 696) != ('THOMASSE', 'Jean-Clau
de', 20)
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 "('THOMASSE',...-CLAUDE', 20)" == 'NOM: THOMASS...,MONTANT : 20'
E         - ('THOMASSE', 'JEAN-CLAUDE', 20)
E         + NOM: THOMASSE,PRENOM:JEAN-CLAUDE,MONTANT : 20

test_TP.py:158: AssertionError
========================= 9 failed, 13 passed in 0.34s =========================

MODIFICATIONS EFFECTUEES SUR LE FICHIER RENDU
=============================================

--- prog.py.orig        2020-06-22 08:23:35.000000000 +0200
+++ prog.py     2020-06-24 14:55:54.000000000 +0200
@@ -11,25 +11,22 @@
 Q2_res = "98"

 ## Question 3
-Q3_req = "SELECT CLI_NOM, CLI_PRENOM from T_CLIENT where TIT_CODE="Mme.";"
+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="Mm
e." or TIT_CODE="Melle.";"
+Q4_req = "SELECT CLI_NOM, CLI_PRENOM, TIT_CODE from T_CLIENT where TIT_CODE='Mm
e.' or TIT_CODE='Melle.';"


 ## Question 5
```

```
-Q5_req = "SELECT count(*) as nbclie from (SELECT CLI_NOM, CLI_PRENOM, TIT_CODE
from T_CLIENT where TIT_CODE="Mme." or TIT_CODE="Melle.");"
+Q5_req = "SELECT count(*) as nbclie from (SELECT CLI_NOM, CLI_PRENOM, TIT_CODE
from T_CLIENT where TIT_CODE='Mme.' or TIT_CODE='Melle.');"
 Q5_res = "17"

 ## Question 6
-Q6_req = "SELECT CLI_NOM as Noms, CLI_PRENOM as Prénoms from
-(SELECT CLI_NOM, CLI_PRENOM, TIT_CODE from T_CLIENT where TIT_CODE="Mme." or TI
T_CODE="Melle.")
-order by CLI_NOM ASC;"
+Q6_req = "SELECT CLI_NOM as Noms, CLI_PRENOM as Prénoms from (SELECT CLI_NOM, C
LI_PRENOM, TIT_CODE from T_CLIENT where TIT_CODE='Mme. or TIT_CODE='Melle.') ord
er by CLI_NOM ASC;"


 ## Question 7
-Q7_req = "SELECT CLI_NOM, TEL_NUMERO from T_CLIENT
-Join T_TELEPHONE on T_CLIENT.CLI_ID=T_TELEPHONE.CLI_ID; "
+Q7_req = "SELECT CLI_NOM, TEL_NUMERO from T_CLIENT Join T_TELEPHONE on T_CLIENT
.CLI_ID=T_TELEPHONE.CLI_ID; "

 ## Question 8
 Q8_req = "SELECT CLI_NOM, CLI_PRENOM, count(*) from T_CLIENT group by CLI_NOM h
aving count(CLI_NOM)>1;"
@@ -44,28 +41,19 @@

 ## Question 11
 Q11_req = "SELECT max(LIF_REMISE_POURCENT), max(LIF_REMISE_MONTANT) from T_LIGN
E_FACTURE;"
-Q11_res = "Pourcent : 24, Montant : 58""
+Q11_res = "Pourcent : 24, Montant : 58"

 ## Question 12
 Q12_req = "Select FAC_ID from T_LIGNE_FACTURE where LIF_REMISE_POURCENT>0 or LI
F_REMISE_MONTANT>0;"


 ## Question 13
-Q13_req = "SELECT DISTINCT CLI_ID from T_FACTURE
-JOIN T_LIGNE_FACTURE on T_LIGNE_FACTURE.FAC_ID=T_FACTURE.FAC_ID
-where LIF_REMISE_POURCENT>0 or LIF_REMISE_MONTANT>0;
-
-;"
+Q13_req = "SELECT DISTINCT CLI_ID from T_FACTURE JOIN T_LIGNE_FACTURE on T_LIGN
E_FACTURE.FAC_ID=T_FACTURE.FAC_ID where LIF_REMISE_POURCENT>0 or LIF_REMISE_MONT
ANT>0;"

 ## Question 14
-Q14_req = "SELECT CLI_ID from T_FACTURE
-except
-SELECT DISTINCT CLI_ID from T_FACTURE
-JOIN T_LIGNE_FACTURE on T_LIGNE_FACTURE.FAC_ID=T_FACTURE.FAC_ID
-where LIF_REMISE_POURCENT>0 or LIF_REMISE_MONTANT>0;"
+Q14_req = "SELECT CLI_ID from T_FACTURE except SELECT DISTINCT CLI_ID from T_FA
CTURE JOIN T_LIGNE_FACTURE on T_LIGNE_FACTURE.FAC_ID=T_FACTURE.FAC_ID where LIF_
REMISE_POURCENT>0 or LIF_REMISE_MONTANT>0;"


 ## Question 15
-Q15_req = "select T_CLIENT.CLI_NOM, T_CLIENT.CLI_PRENOM, max(nbred) from (selec
t T_FACTURE.CLI_ID, count(T_FACTURE.CLI_ID) as nbred from T_FACTURE join T_LIGNE
_FACTURE on T_LIGNE_FACTURE.FAC_ID=T_FACTURE.FAC_ID
-where LIF_REMISE_POURCENT>0 or LIF_REMISE_MONTANT>0 group by CLI_ID) as tout jo
in T_CLIENT on T_client.CLI_ID=tout.CLI_ID;"
+Q15_req = "select T_CLIENT.CLI_NOM, T_CLIENT.CLI_PRENOM, max(nbred) from (selec
t T_FACTURE.CLI_ID, count(T_FACTURE.CLI_ID) as nbred from T_FACTURE join T_LIGNE
_FACTURE on T_LIGNE_FACTURE.FAC_ID=T_FACTURE.FAC_ID where LIF_REMISE_POURCENT>0
```

```
or LIF_REMISE_MONTANT>0 group by CLI_ID) as tout join T_CLIENT on T_client.CLI_I
D=tout.CLI_ID;"
 Q15_res ="nom: THOMASSE,prenom:Jean-Claude,montant : 20"
```

```
NOM = "Castres"
Prenom = "Yann"
Classe = "MPSI 2"
alpha="9"

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

## Question 2
Q2_req = "select count(*) as nbcli from T_CLIENT;"
Q2_res = "98"

## 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
." or TIT_CODE="Melle.";"


## Question 5
Q5_req = "SELECT count(*) as nbclie from (SELECT CLI_NOM, CLI_PRENOM, TIT_CODE f
rom T_CLIENT where TIT_CODE="Mme." or TIT_CODE="Melle.");"
Q5_res = "17"

## Question 6
Q6_req = "SELECT CLI_NOM as Noms, CLI_PRENOM as Prénoms from
(SELECT CLI_NOM, CLI_PRENOM, TIT_CODE from T_CLIENT where TIT_CODE="Mme." or TIT
_CODE="Melle.")
order by CLI_NOM ASC;"


## Question 7
Q7_req = "SELECT CLI_NOM, TEL_NUMERO from T_CLIENT
Join T_TELEPHONE on T_CLIENT.CLI_ID=T_TELEPHONE.CLI_ID; "

## Question 8
Q8_req = "SELECT CLI_NOM, CLI_PRENOM, count(*) from T_CLIENT group by CLI_NOM ha
ving count(CLI_NOM)>1;"

## Question 9
Q9_req = "SELECT CLI_NOM, count(*) from T_CLIENT group by CLI_NOM having count(C
LI_NOM)>1;"
Q9_res = "2 benattar,3 martin"

## Question 10
Q10_req = "SELECT avg(LIF_REMISE_POURCENT), avg(LIF_REMISE_MONTANT) from T_LIGNE
_FACTURE;"
Q10_res = "Pourcent : 24, Montant : 58"

## Question 11
Q11_req = "SELECT max(LIF_REMISE_POURCENT), max(LIF_REMISE_MONTANT) from T_LIGNE
_FACTURE;"
Q11_res = "Pourcent : 24, Montant : 58""

## Question 12
Q12_req = "Select FAC_ID from T_LIGNE_FACTURE where LIF_REMISE_POURCENT>0 or LIF
_REMISE_MONTANT>0;"


## Question 13
Q13_req = "SELECT DISTINCT CLI_ID from T_FACTURE
JOIN T_LIGNE_FACTURE on T_LIGNE_FACTURE.FAC_ID=T_FACTURE.FAC_ID
where LIF_REMISE_POURCENT>0 or LIF_REMISE_MONTANT>0;

;"

## Question 14
```

```
Q14_req = "SELECT CLI_ID from T_FACTURE
except
SELECT DISTINCT CLI_ID from T_FACTURE
JOIN T_LIGNE_FACTURE on T_LIGNE_FACTURE.FAC_ID=T_FACTURE.FAC_ID
where LIF_REMISE_POURCENT>0 or LIF_REMISE_MONTANT>0;"


## Question 15
Q15_req = "select T_CLIENT.CLI_NOM, T_CLIENT.CLI_PRENOM, max(nbred) from (select
 T_FACTURE.CLI_ID, count(T_FACTURE.CLI_ID) as nbred from T_FACTURE join T_LIGNE_
FACTURE on T_LIGNE_FACTURE.FAC_ID=T_FACTURE.FAC_ID
where LIF_REMISE_POURCENT>0 or LIF_REMISE_MONTANT>0 group by CLI_ID) as tout joi
n T_CLIENT on T_client.CLI_ID=tout.CLI_ID;"
Q15_res ="nom: THOMASSE,prenom:Jean-Claude,montant : 20"
```

```
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_cavina
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

test_TP.py ....F......F.F.FF.FFF.                                        [100%]

================================== FAILURES ==================================
_________________________________ test_Q4_req ________________________________

    def test_Q4_req ():
>       assert requete(sol_Q4_req) == requete(Q4_req)

test_TP.py:110:
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

req = "SELECT CLI_NOM, CLI_PRENOM, TIT_CODE FROM T_CLIENT where TIT_CODE='Mme.'
or TIT_CODE=''Melle.';"

    def requete (req):
        conn = sqlite3.connect('../../bdd/hotel_'+convert(alpha)+'.db')
        c=conn.cursor()
>       c.execute(req)
E       sqlite3.OperationalError: near "Melle": syntax error

test_TP.py:25: OperationalError
_________________________________ test_Q10_res _______________________________

    def test_Q10_res ():
>       assert sol_Q10_res.upper() ==  Q10_res.upper()
E       AssertionError: assert '(37.0, 71.0)' == 'REMISE_POURC...ONTANT : 71.0'
E         - (37.0, 71.0)
E         + REMISE_POURCENTAGE: 37.0; REMISE_MONTANT : 71.0

test_TP.py:131: AssertionError
_________________________________ test_Q11_res _______________________________

    def test_Q11_res ():
>       assert sol_Q11_res.upper() ==  Q11_res.upper()
E       AssertionError: assert '(37.0, 71)' == 'MAX_POURCENT...MONTANT : 71 '
E         - (37.0, 71)
E         + MAX_POURCENT : 37 ;MAX_MONTANT : 71

test_TP.py:137: 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 876 more items, first extra item: (714,)
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,), (2,), ...,), (6,), ...] == [(1,), (1,), ...,), (1,), ...]
E         At index 1 diff: (2,) != (1,)
E         Right contains 1058 more items, first extra item: (9,)
```

```
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 "('THIERY', 'FATHY', 781)" == 'LETERRIER,MONIQUE,1491'
E         - ('THIERY', 'FATHY', 781)
E         + LETERRIER,MONIQUE,1491

test_TP.py:152: AssertionError
_____________________________________ test_Q15_req _____________________________________

    def test_Q15_req ():
>       assert requete(sol_Q15_req) == requete(Q15_req)
E       AssertionError: assert [('THIERY', 'Fathy', 781)] == [('LETERRIER', 'Mon
ique', 21)]
E         At index 0 diff: ('THIERY', 'Fathy', 781) != ('LETERRIER', 'Monique',
21)
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 "('LETERRIER', 'MONIQUE', 21)" == 'LETERRIER,MONIQUE,1491'
E         - ('LETERRIER', 'MONIQUE', 21)
E         ? --          - --       - -- ^
E         + LETERRIER,MONIQUE,1491
E         ?                    ^^^

test_TP.py:158: AssertionError
========================== 8 failed, 14 passed in 0.37s ==========================
```

```
NOM = "Cavina"
Prenom = "Theo"
Classe = "MPSI2"
alpha="22"

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

## Question 2
Q2_req = "select count(*) as nb_client from T_CLIENT"
Q2_res = "94"

## 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
.' or TIT_CODE=''Melle.';"


## Question 5
Q5_req = "SELECT count(*) FROM T_CLIENT where TIT_CODE='Mme.' or TIT_CODE='Melle
.';"
Q5_res = "17"

## Question 6
Q6_req = "SELECT CLI_NOM as Noms, CLI_PRENOM as Prénoms FROM T_CLIENT where TIT_
CODE='Mme.' or TIT_CODE='Melle.' order by Noms;"


## Question 7
Q7_req = "select T_CLIENT.CLI_NOM as Noms, T_TELEPHONE.TEL_NUMERO from T_CLIENT
join T_TELEPHONE on T_TELEPHONE.CLI_ID=T_CLIENT.CLI_ID where T_TELEPHONE.TYP_COD
E='TEL';"

## Question 8
Q8_req = "SELECT CLI_NOM from T_CLIENT group by CLI_NOM having count(CLI_NOM)>1;
"

## Question 9
Q9_req = "SELECT CLI_NOM, count(cli_nom) from T_CLIENT group by CLI_NOM having c
ount(CLI_NOM)>1"
Q9_res = "BENATTAR      2; MARTIN       3"

## Question 10
Q10_req = "select avg(LIF_remise_pourcent) as moyenne_pourcent, avg(LIF_remise_m
ontant) as moyenne_montant from T_LIGNE_FACTURE;"
Q10_res = "remise_pourcentage: 37.0; remise_montant : 71.0"

## Question 11
Q11_req = "select max(LIF_remise_pourcent) as max_pourcent, max(LIF_remise_monta
nt) as max_montant from T_LIGNE_FACTURE;"
Q11_res = "max_pourcent : 37 ;max_montant : 71 "

## Question 12
Q12_req = "select FAC_ID as fact_id1 from T_LIGNE_FACTURE where LIF_REMISE_MONTA
NT>0 or LIF_REMISE_POURCENT>0;"


## Question 13
Q13_req = "select T_facture.CLI_ID from T_FACTURE join T_LIGNE_FACTURE on T_LIGN
E_FACTURE.FAC_ID=T_FACTURE.FAC_ID where LIF_REMISE_MONTANT>0 or LIF_REMISE_POURC
ENT>0;"

## Question 14
Q14_req = "select CLI_ID from T_FACTURE except select T_facture.CLI_ID from T_FA
CTURE join T_LIGNE_FACTURE on T_LIGNE_FACTURE.FAC_ID=T_FACTURE.FAC_ID where LIF_
REMISE_MONTANT>0 or LIF_REMISE_POURCENT>0;"
```

```
## Question 15
Q15_req = "select T_CLIENT.CLI_NOM,T_CLIENT.CLI_PRENOM, max(nb_reduc) from (sele
ct T_FACTURE.CLI_ID,count(T_FACTURE.CLI_ID) as nb_reduc from T_FACTURE join T_LI
GNE_FACTURE on T_LIGNE_FACTURE.FAC_ID=T_FACTURE.FAC_ID where LIF_REMISE_MONTANT>
0 or LIF_REMISE_POURCENT>0 group by CLI_ID) as c join T_CLIENT on T_CLIENT.CLI_I
D=c.CLI_ID;"
Q15_res ="LETERRIER,Monique,1491"
```

```
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_chevalier
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

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

=================================== FAILURES ===================================
_____________________________________ test_Q1_req _____________________________________

    def test_Q1_req ():
>       assert requete(sol_Q1_req) == requete(Q1_req)
E       AssertionError: assert [('DUPONT', '...', 'M.'), ...] == [('M.', 'DUPO..
. 'Paul'), ...]
E         At index 0 diff: ('DUPONT', 'Alain', 'M.') != ('M.', 'DUPONT', 'Alain'
)
E         Use -v to get the full diff

test_TP.py:98: AssertionError
_____________________________________ test_Q4_req _____________________________________

    def test_Q4_req ():
>       assert requete(sol_Q4_req) == requete(Q4_req)
E       AssertionError: assert [('DUHAMEL', ... 'Mme.'), ...] == [('Melle.', '..
.Carmen'), ...]
E         At index 0 diff: ('DUHAMEL', 'Evelyne', 'Melle.') != ('Melle.', 'DUHAM
EL', 'Evelyne')
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', '...-52-56'), ...] == [('DUPONT', '..
.-43-21'), ...]
E         At index 2 diff: ('DREYFUS', '01-51-58-52-50') != ('DUPONT', '01-44-28
-52-50')
E         Right contains 47 more items, first extra item: ('AIACH', '04-91-52-51
-52')
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 [('BENATTAR',), ('MARTIN',)] == [('MARTIN', '...'
, 'Bernard')]
E         At index 0 diff: ('BENATTAR',) != ('MARTIN', 'Marc')
E         Right contains 3 more items, first extra item: ('MARTIN', 'Jean-Pierre
')
E         Use -v to get the full diff

test_TP.py:125: AssertionError
_____________________________________ test_Q10_res _____________________________________

    def test_Q10_res ():
>       assert sol_Q10_res.upper() ==  Q10_res.upper()
E       AssertionError: assert '(65.0, 99.0)' == '65.0\t99.0'
E         - (65.0, 99.0)
```

```
E         ? -    ^^    -
E         + 65.0        99.0
E         ?     ^

test_TP.py:131: AssertionError
_____________________________________ test_Q11_res _____________________________________

    def test_Q11_res ():
>       assert sol_Q11_res.upper() ==  Q11_res.upper()
E       AssertionError: assert '(65.0, 99)' == '65\t99'
E         - (65.0, 99)
E         + 65  99

test_TP.py:137: 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 897 more items, first extra item: (690,)
E         Use -v to get the full diff

test_TP.py:143: AssertionError
_____________________________________ test_Q15_res _____________________________________

    def test_Q15_res ():
>       assert sol_Q15_res.upper() ==  Q15_res.upper()
E       assert "('SILLET', 'JACQUES', 1089)" == 'SILLET,JACQUES,1089'
E         - ('SILLET', 'JACQUES', 1089)
E         ? --      - --       - - -
E         + SILLET,JACQUES,1089

test_TP.py:152: AssertionError
_____________________________________ test_Q15_req _____________________________________

    def test_Q15_req ():
>       assert requete(sol_Q15_req) == requete(Q15_req)
E       AssertionError: assert [('SILLET', 'Jacques', 1089)] == []
E         Left contains one more item: ('SILLET', 'Jacques', 1089)
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 "('LETERRIER', 'MONIQUE', 21)" == 'SILLET,JACQUES,1089'
E         - ('LETERRIER', 'MONIQUE', 21)
E         + SILLET,JACQUES,1089

test_TP.py:158: AssertionError
_____________________________________ test_Q15_req2 _____________________________________

    def test_Q15_req2 ():
>       assert requete(sol_Q15_req2) == requete(Q15_req)
E       AssertionError: assert [('LETERRIER', 'Monique', 21)] == []
E         Left contains one more item: ('LETERRIER', 'Monique', 21)
E         Use -v to get the full diff

test_TP.py:161: AssertionError
======================== 11 failed, 11 passed in 0.35s =========================

MODIFICATIONS EFFECTUEES SUR LE FICHIER RENDU
=============================================

--- prog.py.orig        2020-06-22 08:23:38.000000000 +0200
+++ prog.py     2020-06-24 14:55:57.000000000 +0200
```

```
@@ -14,17 +14,15 @@
 Q3_req = "SELECT CLI_NOM, CLI_PRENOM FROM T_CLIENT WHERE TIT_CODE='Mme.'"

 ## Question 4
-Q4_req = "SELECT TIT_CODE, CLI_NOM,CLI_PRENOM FROM T_CLIENT WHERE
-TIT_CODE='Mme.' OR TIT_CODE='Melle.'"
+Q4_req = "SELECT TIT_CODE, CLI_NOM,CLI_PRENOM FROM T_CLIENT WHERE TIT_CODE='Mme
+.' OR TIT_CODE='Melle.'"


 ## Question 5
-Q5_req = "SELECT COUNT( * ) FROM T_CLIENT WHERE TIT_CODE="Mme." OR TIT_CODE='Me
-lle.'"
+Q5_req = "SELECT COUNT( * ) FROM T_CLIENT WHERE TIT_CODE='Mme.' OR TIT_CODE='Me
+lle.'"
 Q5_res = "15"

 ## Question 6
-Q6_req = "SELECT CLI_NOM,CLI_PRENOM FROM T_CLIENT WHERE
-TIT_CODE='Mme.' OR TIT_CODE='Melle.' ORDER BY CLI_NOM,CLI_PRENOM ASC "
+Q6_req = "SELECT CLI_NOM,CLI_PRENOM FROM T_CLIENT WHERE TIT_CODE='Mme.' OR TIT_
+CODE='Melle.' ORDER BY CLI_NOM,CLI_PRENOM ASC "


 ## Question 7
@@ -35,8 +33,7 @@

 ## Question 9
 Q9_req = "SELECT CLI_NOM,nb FROM (SELECT CLI_NOM,COUNT(CLI_NOM) as nb FROM T_CL
-IENT GROUP BY CLI_NOM) WHERE nb>1"
-Q9_res = "BENATTAR     2
-MARTIN 3"
+Q9_res = "BENATTAR     2 MARTIN        3"

 ## Question 10
 Q10_req = "SELECT AVG (LIF_REMISE_POURCENT),AVG(LIF_REMISE_MONTANT) FROM T_LIGN
@@ -51,8 +48,7 @@

 ## Question 13
-Q13_req = "SELECT DISTINCT CLI_ID FROM T_FACTURE JOIN (SELECT FAC_ID as fac_id1
- FROM T_LIGNE_FACTURE WHERE LIF_REMISE_MONTANT NOT NULL OR LIF_REMISE_POURCENT N
-OT NULL)
-ON T_FACTURE.FAC_ID=fac_id1"
+Q13_req = "SELECT DISTINCT CLI_ID FROM T_FACTURE JOIN (SELECT FAC_ID as fac_id1
+ FROM T_LIGNE_FACTURE WHERE LIF_REMISE_MONTANT NOT NULL OR LIF_REMISE_POURCENT N
+OT NULL) ON T_FACTURE.FAC_ID=fac_id1"

 ## Question 14
 Q14_req = "SELECT CLI_ID FROM T_CLIENT EXCEPT SELECT DISTINCT CLI_ID FROM T_FAC
TURE JOIN (SELECT FAC_ID as fac_id1 FROM T_LIGNE_FACTURE WHERE LIF_REMISE_MONTAN
T NOT NULL OR LIF_REMISE_POURCENT NOT NULL) ON T_FACTURE.FAC_ID=fac_id1;"
```

```
NOM = "CHEVALIER"
Prenom = "Valentin"
Classe = "MPSI2"
alpha="50"

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

## Question 2
Q2_req = "SELECT COUNT(*) AS nbclient FROM (SELECT CLI_ID FROM T_CLIENT)"
Q2_res = "90"

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

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


## Question 5
Q5_req = "SELECT COUNT( * ) FROM T_CLIENT WHERE TIT_CODE="Mme." OR TIT_CODE='Mel
le.'"
Q5_res = "15"

## Question 6
Q6_req = "SELECT CLI_NOM,CLI_PRENOM FROM T_CLIENT WHERE
TIT_CODE='Mme.' OR TIT_CODE='Melle.' ORDER BY CLI_NOM,CLI_PRENOM ASC "


## Question 7
Q7_req = "SELECT CLI_NOM, TEL_NUMERO FROM T_CLIENT JOIN T_TELEPHONE ON T_CLIENT.
CLI_ID=T_TELEPHONE.CLI_ID"

## Question 8
Q8_req = "SELECT CLI_NOM,CLI_PRENOM FROM T_CLIENT JOIN(SELECT CLI_NOM as nom,COU
NT(CLI_NOM) as nb FROM T_CLIENT GROUP BY CLI_NOM)ON T_CLIENT.CLI_NOM=nom  WHERE
nb>1"

## Question 9
Q9_req = "SELECT CLI_NOM,nb FROM (SELECT CLI_NOM,COUNT(CLI_NOM) as nb FROM T_CLI
ENT GROUP BY CLI_NOM) WHERE nb>1"
Q9_res = "BENATTAR      2
MARTIN  3"

## Question 10
Q10_req = "SELECT AVG (LIF_REMISE_POURCENT),AVG(LIF_REMISE_MONTANT) FROM T_LIGNE
_FACTURE"
Q10_res = "65.0 99.0"

## Question 11
Q11_req = "SELECT max (LIF_REMISE_POURCENT),max(LIF_REMISE_MONTANT) FROM T_LIGNE
_FACTURE"
Q11_res = "65   99"

## Question 12
Q12_req = "SELECT FAC_ID as fac_id1 FROM T_LIGNE_FACTURE WHERE LIF_REMISE_MONTAN
T NOT NULL OR LIF_REMISE_POURCENT NOT NULL"


## Question 13
Q13_req = "SELECT DISTINCT CLI_ID FROM T_FACTURE JOIN (SELECT FAC_ID as fac_id1
FROM T_LIGNE_FACTURE WHERE LIF_REMISE_MONTANT NOT NULL OR LIF_REMISE_POURCENT NO
T NULL)
ON T_FACTURE.FAC_ID=fac_id1"

## Question 14
Q14_req = "SELECT CLI_ID FROM T_CLIENT EXCEPT SELECT DISTINCT CLI_ID FROM T_FACT
```

```
URE JOIN (SELECT FAC_ID as fac_id1 FROM T_LIGNE_FACTURE WHERE LIF_REMISE_MONTANT
 NOT NULL OR LIF_REMISE_POURCENT NOT NULL) ON T_FACTURE.FAC_ID=fac_id1;"


## Question 15
Q15_req = ""
Q15_res ="SILLET,Jacques,1089"
```

```
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_clausse
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

test_TP.py F...F..FFFFF.F.F.FFFFF                                        [100%]

=================================== FAILURES ===================================
_____________________________________ test_Q1_req _____________________________________

    def test_Q1_req ():
>       assert requete(sol_Q1_req) == requete(Q1_req)
E       AssertionError: assert [('DUPONT', '...Melle.'), ...] == [('DUPONT', '..
.iselle'), ...]
E         At index 0 diff: ('DUPONT', 'Alain', 'M.') != ('DUPONT', 'Alain', 'Mon
sieur')
E         Use -v to get the full diff

test_TP.py:98: AssertionError
_____________________________________ test_Q4_req _____________________________________

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

test_TP.py:110: AssertionError
_____________________________________ test_Q6_req _____________________________________

    def test_Q6_req ():
>       assert requete(sol_Q6_req) == requete(Q6_req)

test_TP.py:119:
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

req = "SELECT T_CLIENT.CLI_NOM as Noms, T_CLIENT.CLI_PRENOM as Prénoms FROM T_CL
IENT JOIN T_TITRE ON T_CLIENT.TIT_CODE = T_TITRE.TIT_CODE WHERE T_TITRE.TIT_LIBE
LLE = Madame' or T_TITRE.TIT_LIBELLE = 'Mademoiselle' ORDER BY Noms ASC, Prénoms
 ASC"

    def requete (req):
        conn = sqlite3.connect('../../bdd/hotel_'+convert(alpha)+'.db')
        c=conn.cursor()
>       c.execute(req)
E       sqlite3.OperationalError: near "' or T_TITRE.TIT_LIBELLE = '": syntax er
ror

test_TP.py:25: OperationalError
_____________________________________ test_Q7_req _____________________________________

    def test_Q7_req ():
>       assert requete(sol_Q7_req) == requete(Q7_req)
E       AssertionError: assert [('DUPONT', '...-92-21'), ...] == [('DUPONT', '..
.-52-50'), ...]
E         At index 0 diff: ('DUPONT', '01-45-42-56-63') != ('DUPONT', 'Alain', '
01-45-42-56-63')
E         Right contains 49 more items, first extra item: ('GAL', 'Fabrice', '04
-90-78-10-68')
```

```
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 [('BENATTAR',), ('MARTIN',)] == []
E         Left contains 2 more items, first extra item: ('BENATTAR',)
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 [('BENATTAR',...('MARTIN', 2)] == []
E         Left contains 2 more items, first extra item: ('BENATTAR', 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 '(56.0, 90.0)' == '56% ET 90'
E         - (56.0, 90.0)
E         + 56% ET 90

test_TP.py:131: AssertionError
_____________________________________ test_Q11_res _____________________________________

    def test_Q11_res ():
>       assert sol_Q11_res.upper() ==  Q11_res.upper()
E       AssertionError: assert '(56.0, 90)' == '56% ET 90'
E         - (56.0, 90)
E         + 56% ET 90

test_TP.py:137: 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 897 more items, first extra item: (690,)
E         Use -v to get the full diff

test_TP.py:143: AssertionError
_____________________________________ test_Q14_req _____________________________________

    def test_Q14_req ():
>       assert requete(sol_Q14_req) == requete(Q14_req)
E       assert [] == [(1,), (3,), ...,), (8,), ...]
E         Right contains 93 more items, first extra item: (1,)
E         Use -v to get the full diff

test_TP.py:149: AssertionError
_____________________________________ test_Q15_res _____________________________________

    def test_Q15_res ():
>       assert sol_Q15_res.upper() ==  Q15_res.upper()
E       assert "('MEDARD', 'JACQUES', 1080)" == 'FAYOLLE,OLIVIER,MONTANT'
E         - ('MEDARD', 'JACQUES', 1080)
E         + FAYOLLE,OLIVIER,MONTANT

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', 1080)] == [(18, 192)]
E         At index 0 diff: ('MEDARD', 'Jacques', 1080) != (18, 192)
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 "('LETERRIER', 'MONIQUE', 21)" == 'FAYOLLE,OLIVIER,MONTANT'
E         - ('LETERRIER', 'MONIQUE', 21)
E         + FAYOLLE,OLIVIER,MONTANT

test_TP.py:158: AssertionError
_____________________________________ test_Q15_req2 _____________________________________

    def test_Q15_req2 ():
>       assert requete(sol_Q15_req2) == requete(Q15_req)
E       AssertionError: assert [('LETERRIER', 'Monique', 21)] == [(18, 192)]
E         At index 0 diff: ('LETERRIER', 'Monique', 21) != (18, 192)
E         Use -v to get the full diff

test_TP.py:161: AssertionError
========================== 14 failed, 8 passed in 0.38s ==========================

MODIFICATIONS EFFECTUEES SUR LE FICHIER RENDU
=============================================

--- prog.py.orig        2020-06-22 08:23:39.000000000 +0200
+++ prog.py     2020-06-24 14:56:00.000000000 +0200
@@ -11,18 +11,18 @@
 Q2_res = "93"

 ## Question 3
-Q3_req = "SELECT T_CLIENT.CLI_NOM as nom, T_CLIENT.CLI_PRENOM as prenom FROM T_
CLIENT  JOIN T_TITRE ON T_CLIENT.TIT_CODE = T_TITRE.TIT_CODE WHERE T_TITRE.TIT_L
IBELLE = "Madame""
+Q3_req = "SELECT T_CLIENT.CLI_NOM as nom, T_CLIENT.CLI_PRENOM as prenom FROM T_
CLIENT  JOIN T_TITRE ON T_CLIENT.TIT_CODE = T_TITRE.TIT_CODE WHERE T_TITRE.TIT_L
IBELLE = 'Madame'"

 ## Question 4
-Q4_req = "SELECT T_CLIENT.CLI_NOM as nom, T_CLIENT.CLI_PRENOM as prenom, T_TITR
E.TIT_LIBELLE as titre FROM T_CLIENT  JOIN T_TITRE ON T_CLIENT.TIT_CODE = T_TITR
E.TIT_CODE WHERE T_TITRE.TIT_LIBELLE = "Madame" or T_TITRE.TIT_LIBELLE = "Mademo
iselle""
+Q4_req = "SELECT T_CLIENT.CLI_NOM as nom, T_CLIENT.CLI_PRENOM as prenom, T_TITR
E.TIT_LIBELLE as titre FROM T_CLIENT  JOIN T_TITRE ON T_CLIENT.TIT_CODE = T_TITR
E.TIT_CODE WHERE T_TITRE.TIT_LIBELLE = 'Madame' or T_TITRE.TIT_LIBELLE = 'Mademo
iselle'"


 ## Question 5
-Q5_req = "SELECT count (*) as nb_cliente FROM T_CLIENT JOIN T_TITRE ON T_CLIENT
.TIT_CODE = T_TITRE.TIT_CODE WHERE T_TITRE.TIT_LIBELLE = "Madame" or T_TITRE.TIT
_LIBELLE = "Mademoiselle""
+Q5_req = "SELECT count (*) as nb_cliente FROM T_CLIENT JOIN T_TITRE ON T_CLIENT
.TIT_CODE = T_TITRE.TIT_CODE WHERE T_TITRE.TIT_LIBELLE = 'Madame' or T_TITRE.TIT
_LIBELLE = 'Mademoiselle'"
 Q5_res = "16"

 ## Question 6
-Q6_req = "SELECT T_CLIENT.CLI_NOM as Noms, T_CLIENT.CLI_PRENOM as Prénoms FROM
T_CLIENT JOIN T_TITRE ON T_CLIENT.TIT_CODE = T_TITRE.TIT_CODE WHERE T_TITRE.TIT_
LIBELLE = "Madame" or T_TITRE.TIT_LIBELLE = "Mademoiselle" ORDER BY Noms ASC, Pr
```

```
énoms ASC"
+Q6_req = "SELECT T_CLIENT.CLI_NOM as Noms, T_CLIENT.CLI_PRENOM as Prénoms FROM
T_CLIENT JOIN T_TITRE ON T_CLIENT.TIT_CODE = T_TITRE.TIT_CODE WHERE T_TITRE.TIT_
LIBELLE = Madame' or T_TITRE.TIT_LIBELLE = 'Mademoiselle' ORDER BY Noms ASC, Pré
noms ASC"


 ## Question 7
@@ -44,22 +44,20 @@
 Q11_res = "56% et 90"

 ## Question 12
-Q12_req = "SELECT T_LIGNE_FACTURE.FAC_ID as fac_id1 FROM T_LIGNE_FACTURE WHERE
T_LIGNE_FACTURE.LIF_REMISE_MONTANT > 0 or T_LIGNE_FACTURE.LIF_REMISE_POURCENT >
0
-"
+Q12_req = "SELECT T_LIGNE_FACTURE.FAC_ID as fac_id1 FROM T_LIGNE_FACTURE WHERE
T_LIGNE_FACTURE.LIF_REMISE_MONTANT > 0 or T_LIGNE_FACTURE.LIF_REMISE_POURCENT >
0"


 ## Question 13
-Q13_req = "SELECT DISTINCT T_FACTURE.CLI_ID FROM T_LIGNE_FACTURE JOIN T_FACTURE
 ON T_LIGNE_FACTURE.FAC_ID = T_FACTURE.FAC_ID WHERE T_LIGNE_FACTURE.LIF_REMISE_M
ONTANT > 0 or T_LIGNE_FACTURE.LIF_REMISE_POURCENT > 0
-"
+Q13_req = "SELECT DISTINCT T_FACTURE.CLI_ID FROM T_LIGNE_FACTURE JOIN T_FACTURE
 ON T_LIGNE_FACTURE.FAC_ID = T_FACTURE.FAC_ID WHERE T_LIGNE_FACTURE.LIF_REMISE_M
ONTANT > 0 or T_LIGNE_FACTURE.LIF_REMISE_POURCENT > 0"

 ## Question 14
 Q14_req = "SELECT DISTINCT T_FACTURE.CLI_ID FROM T_LIGNE_FACTURE JOIN T_FACTURE
 ON T_LIGNE_FACTURE.FAC_ID = T_FACTURE.FAC_ID WHERE T_LIGNE_FACTURE.LIF_REMISE_M
ONTANT is NULL AND T_LIGNE_FACTURE.LIF_REMISE_POURCENT is NULL"


 ## Question 15
-Q15_req = "SELECT T_FACTURE.CLI_ID, count (*) as nb FROM T_LIGNE_FACTURE, T_FAC
TURE WHERE T_LIGNE_FACTURE.FAC_ID = T_FACTURE.FAC_ID GROUP BY T_FACTURE.CLI_ID O
RDER BY nb DESC LIMIT 1
+Q15_req = "SELECT T_FACTURE.CLI_ID, count (*) as nb FROM T_LIGNE_FACTURE, T_FAC
TURE WHERE T_LIGNE_FACTURE.FAC_ID = T_FACTURE.FAC_ID GROUP BY T_FACTURE.CLI_ID O
RDER BY nb DESC LIMIT 1"

-SELECT T_CLIENT.CLI_NOM, T_CLIENT.CLI_PRENOM FROM T_CLIENT WHERE T_CLIENT.CLI_I
D = 18
+# SELECT T_CLIENT.CLI_NOM, T_CLIENT.CLI_PRENOM FROM T_CLIENT WHERE T_CLIENT.CLI
_ID = 18

-SELECT SUM( T_LIGNE_FACTURE.LIF_REMISE_MONTANT) FROM T_LIGNE_FACTURE WHERE T_LI
GNE_FACTURE.FAC_ID = (SELECT T_FACTURE.FAC_ID FROM T_FACTURE WHERE T_FACTURE.CLI
_ID = 18 )"
+#SELECT SUM( T_LIGNE_FACTURE.LIF_REMISE_MONTANT) FROM T_LIGNE_FACTURE WHERE T_L
IGNE_FACTURE.FAC_ID = (SELECT T_FACTURE.FAC_ID FROM T_FACTURE WHERE T_FACTURE.CL
I_ID = 18 )"
 Q15_res ="fayolle,olivier,montant"
```

```
NOM = "CLAUSSE"
Prenom = "Agathe"
Classe = "MPSI2"
alpha="41"

## Question 1
Q1_req = "SELECT T_CLIENT.CLI_NOM as nom, T_CLIENT.CLI_PRENOM as prenom, T_TITRE
.TIT_LIBELLE as titre FROM T_CLIENT JOIN T_TITRE ON T_CLIENT.TIT_CODE = T_TITRE.
TIT_CODE "

## Question 2
Q2_req = "SELECT COUNT (*) as nb_client FROM T_CLIENT"
Q2_res = "93"

## Question 3
Q3_req = "SELECT T_CLIENT.CLI_NOM as nom, T_CLIENT.CLI_PRENOM as prenom FROM T_C
LIENT  JOIN T_TITRE ON T_CLIENT.TIT_CODE = T_TITRE.TIT_CODE WHERE T_TITRE.TIT_LI
BELLE = "Madame""

## Question 4
Q4_req = "SELECT T_CLIENT.CLI_NOM as nom, T_CLIENT.CLI_PRENOM as prenom, T_TITRE
.TIT_LIBELLE as titre FROM T_CLIENT  JOIN T_TITRE ON T_CLIENT.TIT_CODE = T_TITRE
.TIT_CODE WHERE T_TITRE.TIT_LIBELLE = "Madame" or T_TITRE.TIT_LIBELLE = "Mademoi
selle""


## Question 5
Q5_req = "SELECT count (*) as nb_cliente FROM T_CLIENT JOIN T_TITRE ON T_CLIENT.
TIT_CODE = T_TITRE.TIT_CODE WHERE T_TITRE.TIT_LIBELLE = "Madame" or T_TITRE.TIT_
LIBELLE = "Mademoiselle""
Q5_res = "16"

## Question 6
Q6_req = "SELECT T_CLIENT.CLI_NOM as Noms, T_CLIENT.CLI_PRENOM as Prénoms FROM T
_CLIENT JOIN T_TITRE ON T_CLIENT.TIT_CODE = T_TITRE.TIT_CODE WHERE T_TITRE.TIT_L
IBELLE = "Madame" or T_TITRE.TIT_LIBELLE = "Mademoiselle" ORDER BY Noms ASC, Pré
noms ASC"


## Question 7
Q7_req = "SELECT T_CLIENT.CLI_NOM as nom, T_CLIENT.CLI_PRENOM as prenom, T_TELEP
HONE.TEL_NUMERO as numéro FROM T_CLIENT JOIN T_TELEPHONE ON T_CLIENT.CLI_ID = T_
TELEPHONE.CLI_ID"

## Question 8
Q8_req = ""

## Question 9
Q9_req = ""
Q9_res = ""

## Question 10
Q10_req = "SELECT AVG(T_LIGNE_FACTURE.LIF_REMISE_POURCENT) as pourcent, AVG(T_LI
GNE_FACTURE.LIF_REMISE_MONTANT) as montant FROM T_LIGNE_FACTURE"
Q10_res = "56% et 90"

## Question 11
Q11_req = "SELECT max(T_LIGNE_FACTURE.LIF_REMISE_POURCENT) as pourcent, max(T_LI
GNE_FACTURE.LIF_REMISE_MONTANT) as montant FROM T_LIGNE_FACTURE"
Q11_res = "56% et 90"

## Question 12
Q12_req = "SELECT T_LIGNE_FACTURE.FAC_ID as fac_id1 FROM T_LIGNE_FACTURE WHERE T
_LIGNE_FACTURE.LIF_REMISE_MONTANT > 0 or T_LIGNE_FACTURE.LIF_REMISE_POURCENT > 0
"


## Question 13
```

```
Q13_req = "SELECT DISTINCT T_FACTURE.CLI_ID FROM T_LIGNE_FACTURE JOIN T_FACTURE
ON T_LIGNE_FACTURE.FAC_ID = T_FACTURE.FAC_ID WHERE T_LIGNE_FACTURE.LIF_REMISE_MO
NTANT > 0 or T_LIGNE_FACTURE.LIF_REMISE_POURCENT > 0
"

## Question 14
Q14_req = "SELECT DISTINCT T_FACTURE.CLI_ID FROM T_LIGNE_FACTURE JOIN T_FACTURE
ON T_LIGNE_FACTURE.FAC_ID = T_FACTURE.FAC_ID WHERE T_LIGNE_FACTURE.LIF_REMISE_MO
NTANT is NULL AND T_LIGNE_FACTURE.LIF_REMISE_POURCENT is NULL"


## Question 15
Q15_req = "SELECT T_FACTURE.CLI_ID, count (*) as nb FROM T_LIGNE_FACTURE, T_FACT
URE WHERE T_LIGNE_FACTURE.FAC_ID = T_FACTURE.FAC_ID GROUP BY T_FACTURE.CLI_ID OR
DER BY nb DESC LIMIT 1

SELECT T_CLIENT.CLI_NOM, T_CLIENT.CLI_PRENOM FROM T_CLIENT WHERE T_CLIENT.CLI_ID
 = 18

SELECT SUM( T_LIGNE_FACTURE.LIF_REMISE_MONTANT) FROM T_LIGNE_FACTURE WHERE T_LIG
NE_FACTURE.FAC_ID = (SELECT T_FACTURE.FAC_ID FROM T_FACTURE WHERE T_FACTURE.CLI_
ID = 18 )"
Q15_res ="fayolle,olivier,montant"
```

```
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_cros-wieczorek
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

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

=================================== FAILURES ===================================
_____________________________________ test_Q1_req _____________________________________

    def test_Q1_req ():
>       assert requete(sol_Q1_req) == requete(Q1_req)
E       AssertionError: assert [('DUPONT', '...', 'M.'), ...] == [(87,)]
E         At index 0 diff: ('DUPONT', 'Alain', 'M.') != (87,)
E         Left contains 86 more items, first extra item: ('MARTIN', 'Marc', 'M.'
)
E         Use -v to get the full diff

test_TP.py:98: AssertionError
_____________________________________ test_Q3_req _____________________________________

    def test_Q3_req ():
>       assert requete(sol_Q3_req) == requete(Q3_req)
E       AssertionError: assert [('BOYER', 'M...ueline'), ...] == [('Martine', ..
.'DAVID'), ...]
E         At index 0 diff: ('BOYER', 'Martine') != ('Martine', 'BOYER')
E         Use -v to get the full diff

test_TP.py:107: AssertionError
_____________________________________ test_Q4_req _____________________________________

    def test_Q4_req ():
>       assert requete(sol_Q4_req) == requete(Q4_req)
E       AssertionError: assert [('DUHAMEL', ... 'Mme.'), ...] == [('Evelyne', ..
. 'Mme.'), ...]
E         At index 0 diff: ('DUHAMEL', 'Evelyne', 'Melle.') != ('Evelyne', 'DUHA
MEL', 'Melle.')
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', '...-52-56'), ...] == [('DUPONT', '..
.-43-21'), ...]
E         At index 2 diff: ('DREYFUS', '01-51-58-52-50') != ('DUPONT', '01-44-28
-52-50')
E         Right contains 43 more items, first extra item: ('AIACH', '04-91-52-51
-52')
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 [('BENATTAR',), ('MARTIN',)] == [('MARTIN', '...'
, 'Bernard')]
E         At index 0 diff: ('BENATTAR',) != ('MARTIN', 'Marc')
E         Right contains 3 more items, first extra item: ('MARTIN', 'Jean-Pierre
```

```
')
E         Use -v to get the full diff

test_TP.py:125: AssertionError
_____________________________________ test_Q10_res _____________________________________

    def test_Q10_res ():
>       assert sol_Q10_res.upper() ==  Q10_res.upper()
E       AssertionError: assert '(87.0, 121.0)' == 'POURCENT : 8...ONTANT: 121.0'
E         - (87.0, 121.0)
E         + POURCENT : 87.0, MONTANT: 121.0

test_TP.py:131: AssertionError
_____________________________________ test_Q11_res _____________________________________

    def test_Q11_res ():
>       assert sol_Q11_res.upper() ==  Q11_res.upper()
E       AssertionError: assert '(87.0, 121)' == 'POURCENT : 8...NTANT : 121.0'
E         - (87.0, 121)
E         + POURCENT : 87.0,MONTANT : 121.0

test_TP.py:137: 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_Q15_res _____________________________________

    def test_Q15_res ():
>       assert sol_Q15_res.upper() ==  Q15_res.upper()
E       assert "('SILLET', 'JACQUES', 1331)" == 'NOM,PRENOM,MONTANT'
E         - ('SILLET', 'JACQUES', 1331)
E         + NOM,PRENOM,MONTANT

test_TP.py:152: AssertionError
_____________________________________ test_Q15_req _____________________________________

    def test_Q15_req ():
>       assert requete(sol_Q15_req) == requete(Q15_req)
E       AssertionError: assert [('SILLET', 'Jacques', 1331)] == []
E         Left contains one more item: ('SILLET', 'Jacques', 1331)
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 "('LETERRIER', 'MONIQUE', 21)" == 'NOM,PRENOM,MONTANT'
E         - ('LETERRIER', 'MONIQUE', 21)
E         + NOM,PRENOM,MONTANT

test_TP.py:158: AssertionError
_____________________________________ test_Q15_req2 _____________________________________

    def test_Q15_req2 ():
>       assert requete(sol_Q15_req2) == requete(Q15_req)
E       AssertionError: assert [('LETERRIER', 'Monique', 21)] == []
E         Left contains one more item: ('LETERRIER', 'Monique', 21)
E         Use -v to get the full diff

test_TP.py:161: AssertionError
```

```
======================== 12 failed, 10 passed in 0.36s =========================

MODIFICATIONS EFFECTUEES SUR LE FICHIER RENDU
=============================================

--- prog.py.orig        2020-06-22 08:23:41.000000000 +0200
+++ prog.py     2020-06-24 14:56:01.000000000 +0200
@@ -22,7 +22,7 @@
 Q5_res = "13"

 ## Question 6
-Q6_req = "SELECT CLI_NOM, CLI_PRENOM FROM T_CLIENT WHERE TIT_CODE="Mme." OR TIT
_CODE="Melle." ORDER BY CLI_NOM,CLI_PRENOM ASC"
+Q6_req = "SELECT CLI_NOM, CLI_PRENOM FROM T_CLIENT WHERE TIT_CODE='Mme.' OR TIT
_CODE='Melle.' ORDER BY CLI_NOM,CLI_PRENOM ASC"


 ## Question 7
```

```
NOM = "Cros-Wieczorek"
Prenom = "Louis"
Classe = "MPSI2"
alpha="72"

## Question 1
Q1_req = "SELECT COUNT(*) as nbclients FROM (SELECT DISTINCT CLI_ID FROM T_CLIEN
T)"

## Question 2
Q2_req = "SELECT COUNT(*) as nbclients FROM (SELECT DISTINCT CLI_ID FROM T_CLIEN
T)"
Q2_res = "87"

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

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


## Question 5
Q5_req = "SELECT COUNT( * ) FROM T_CLIENT WHERE TIT_CODE='Mme.' OR TIT_CODE='Mel
le.'"
Q5_res = "13"

## Question 6
Q6_req = "SELECT CLI_NOM, CLI_PRENOM FROM T_CLIENT WHERE TIT_CODE="Mme." OR TIT_
CODE="Melle." ORDER BY CLI_NOM,CLI_PRENOM ASC"


## Question 7
Q7_req = "SELECT CLI_NOM, TEL_NUMERO FROM T_CLIENT JOIN T_TELEPHONE ON T_CLIENT.
CLI_ID=T_TELEPHONE.CLI_ID"

## Question 8
Q8_req = "SELECT CLI_NOM,CLI_PRENOM FROM T_CLIENT JOIN(SELECT CLI_NOM as nom,COU
NT(CLI_NOM) as nb FROM T_CLIENT GROUP BY CLI_NOM)ON T_CLIENT.CLI_NOM=nom  WHERE
nb>1"

## Question 9
Q9_req = "SELECT CLI_NOM,nb FROM (SELECT CLI_NOM,COUNT(CLI_NOM) as nb FROM T_CLI
ENT GROUP BY CLI_NOM) WHERE nb>1"
Q9_res = "3 Martin et 2 Benattar"

## Question 10
Q10_req = "SELECT AVG (LIF_REMISE_POURCENT),AVG(LIF_REMISE_MONTANT) FROM T_LIGNE
_FACTURE"
Q10_res = "Pourcent : 87.0, Montant: 121.0"

## Question 11
Q11_req = "SELECT MAX(LIF_REMISE_POURCENT),MAX(LIF_REMISE_MONTANT) FROM T_LIGNE_
FACTURE"
Q11_res = "Pourcent : 87.0,Montant : 121.0"

## Question 12
Q12_req = "SELECT FAC_ID as fac_id1 FROM T_LIGNE_FACTURE WHERE LIF_REMISE_MONTAN
T NOT NULL OR LIF_REMISE_POURCENT NOT NULL"


## Question 13
Q13_req = "SELECT DISTINCT CLI_ID FROM T_FACTURE JOIN (SELECT FAC_ID as fac_id1
FROM T_LIGNE_FACTURE WHERE LIF_REMISE_MONTANT NOT NULL OR LIF_REMISE_POURCENT NO
T NULL) ON T_FACTURE.FAC_ID=fac_id1"

## Question 14
Q14_req = "SELECT CLI_ID FROM T_CLIENT EXCEPT SELECT DISTINCT CLI_ID FROM T_FACT
```

```
URE JOIN (SELECT FAC_ID as fac_id1 FROM T_LIGNE_FACTURE WHERE LIF_REMISE_MONTANT
 NOT NULL OR LIF_REMISE_POURCENT NOT NULL) ON T_FACTURE.FAC_ID=fac_id1"


## Question 15
Q15_req = ""
Q15_res ="nom,prenom,montant"
```

```
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_debono
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

test_TP.py ........FF.F.F...FFFFF                                        [100%]

=================================== FAILURES ===================================
_____________________________________ test_Q7_req _____________________________________

    def test_Q7_req ():
>       assert requete(sol_Q7_req) == requete(Q7_req)
E       AssertionError: assert [('DUPONT', '...-92-21'), ...] == [('DUPONT', '..
.-52-50'), ...]
E         At index 2 diff: ('DUBOIS', '02-41-58-89-52') != ('DUPONT', '01-44-28-
52-50')
E         Right contains 50 more items, first extra item: ('GAL', '04-90-78-10-6
8')
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 [('BENATTAR',), ('MARTIN',)] == [(2, 'M.', 'M...r
nard', None)]
E         At index 0 diff: ('BENATTAR',) != (2, 'M.', 'MARTIN', 'Marc', 'Transpo
rts MARTIN & fils')
E         Right contains 3 more items, first extra item: (75, 'M.', 'MARTIN', 'J
ean-Pierre', None)
E         Use -v to get the full diff

test_TP.py:125: AssertionError
_____________________________________ test_Q10_res _____________________________________

    def test_Q10_res ():
>       assert sol_Q10_res.upper() ==  Q10_res.upper()
E       AssertionError: assert '(20.0, 54.0)' == '20.0 54.0'
E         - (20.0, 54.0)
E         ? -    -     -
E         + 20.0 54.0

test_TP.py:131: AssertionError
_____________________________________ test_Q11_res _____________________________________

    def test_Q11_res ():
>       assert sol_Q11_res.upper() ==  Q11_res.upper()
E       AssertionError: assert '(20.0, 54)' == '20 54'
E         - (20.0, 54)
E         + 20 54

test_TP.py:137: AssertionError
_____________________________________ test_Q14_req _____________________________________

    def test_Q14_req ():
>       assert requete(sol_Q14_req) == requete(Q14_req)
E       assert [] == [(1,), (2,), ...,), (6,), ...]
E         Right contains 99 more items, first extra item: (1,)
E         Use -v to get the full diff
```

```
test_TP.py:149: AssertionError
_____________________________________ test_Q15_res _____________________________________

    def test_Q15_res ():
>       assert sol_Q15_res.upper() ==  Q15_res.upper()
E       assert "('MEDARD', 'JACQUES', 648)" == 'NOM,PRENOM,MONTANT'
E         - ('MEDARD', 'JACQUES', 648)
E         + NOM,PRENOM,MONTANT

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', 648)] == []
E         Left contains one more item: ('MEDARD', 'Jacques', 648)
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 "('THOMASSE',...-CLAUDE', 20)" == 'NOM,PRENOM,MONTANT'
E         - ('THOMASSE', 'JEAN-CLAUDE', 20)
E         + NOM,PRENOM,MONTANT

test_TP.py:158: AssertionError
_____________________________________ test_Q15_req2 _____________________________________

    def test_Q15_req2 ():
>       assert requete(sol_Q15_req2) == requete(Q15_req)
E       AssertionError: assert [('THOMASSE',...-Claude', 20)] == []
E         Left contains one more item: ('THOMASSE', 'Jean-Claude', 20)
E         Use -v to get the full diff

test_TP.py:161: AssertionError
========================== 9 failed, 13 passed in 8.63s ==========================
```

```
NOM = "DEBONO"
Prenom = "Juliette"
Classe = "MPSI 2"
alpha="5"

## 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 = "99"

## 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 != '
M.'"


## Question 5
Q5_req = "SELECT COUNT(*) FROM T_CLIENT WHERE TIT_CODE != 'M.'"
Q5_res = "16"

## Question 6
Q6_req = "SELECT CLI_NOM AS 'Noms', CLI_PRENOM AS 'Prénons' FROM T_CLIENT WHERE
TIT_CODE != 'M.' ORDER BY CLI_NOM, CLI_PRENOM;"


## Question 7
Q7_req = "SELECT CLI_NOM, TEL_NUMERO FROM T_CLIENT, T_TELEPHONE WHERE T_CLIENT.C
LI_ID = T_TELEPHONE.CLI_ID;"

## Question 8
Q8_req = "SELECT * FROM T_CLIENT WHERE CLI_NOM IN (SELECT CLI_NOM FROM T_CLIENT
GROUP BY CLI_NOM HAVING COUNT(CLI_NOM) > 1);"

## Question 9
Q9_req = "SELECT CLI_NOM, count(CLI_NOM) FROM T_CLIENT GROUP BY CLI_NOM HAVING C
OUNT(CLI_NOM) > 1;"
Q9_res = "BENATTAR 2 MARTIN 3"

## Question 10
Q10_req = "SELECT AVG(LIF_REMISE_POURCENT) as 'Moyenne pourcent', AVG(LIF_REMISE
_MONTANT) as 'Moyenne montant' FROM T_LIGNE_FACTURE;"
Q10_res = "20.0 54.0"

## Question 11
Q11_req = "SELECT Max(LIF_REMISE_POURCENT) as 'Max pourcent', Max(LIF_REMISE_MON
TANT) as 'Max montant' FROM T_LIGNE_FACTURE;"
Q11_res = "20 54"

## Question 12
Q12_req = "SELECT DISTINCT FAC_ID AS 'fac_id1' FROM T_LIGNE_FACTURE WHERE LIF_RE
MISE_POURCENT NOT NULL OR LIF_REMISE_MONTANT NOT NULL;"


## Question 13
Q13_req = "SELECT DISTINCT CLI_ID FROM T_FACTURE, T_LIGNE_FACTURE WHERE LIF_REMI
SE_POURCENT NOT NULL OR LIF_REMISE_MONTANT NOT NULL;"

## Question 14
Q14_req = "SELECT DISTINCT CLI_ID FROM T_FACTURE, T_LIGNE_FACTURE WHERE LIF_REMI
SE_POURCENT IS NULL AND LIF_REMISE_MONTANT IS NULL;"


## Question 15
Q15_req = ""
```

```
Q15_res ="nom,prenom,montant"
```

```
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_deraigne
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

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

=================================== FAILURES ===================================
_____________________________________ test_Q7_req _____________________________________

    def test_Q7_req ():
>       assert requete(sol_Q7_req) == requete(Q7_req)
E       AssertionError: assert [('DUBOIS', '...-87-87'), ...] == [('BOUVIER', ..
.-92-21'), ...]
E         At index 0 diff: ('DUBOIS', '02-41-58-89-52') != ('BOUVIER', '06-11-86
-78-89')
E         Right contains 41 more items, first extra item: ('CHAMBON', '05-59-03-
54-09')
E         Use -v to get the full diff

test_TP.py:122: AssertionError
_____________________________________ test_Q10_res _____________________________________

    def test_Q10_res ():
>       assert sol_Q10_res.upper() ==  Q10_res.upper()
E       AssertionError: assert '(73.0, 107.0)' == 'POUR LE MONT...ENTAGE : 73.0'
E         - (73.0, 107.0)
E         + POUR LE MONTANT : 107.0 ET POUR LE POURCENTAGE : 73.0

test_TP.py:131: AssertionError
_____________________________________ test_Q10_req _____________________________________

    def test_Q10_req ():
>       assert requete(sol_Q10_req) == requete(Q10_req)
E       assert [(73.0, 107.0)] == [(107.0, 73.0)]
E         At index 0 diff: (73.0, 107.0) != (107.0, 73.0)
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 '(73.0, 107)' == 'POUR LE MONT...ENTAGE : 73.0'
E         - (73.0, 107)
E         + POUR LE MONTANT : 107.0 ET POUR LE POURCENTAGE : 73.0

test_TP.py:137: AssertionError
_____________________________________ test_Q11_req _____________________________________

    def test_Q11_req ():
>       assert requete(sol_Q11_req) == requete(Q11_req)
E       assert [(73.0, 107)] == [(107, 73)]
E         At index 0 diff: (73.0, 107) != (107, 73)
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,), ...), (27,), ...] == [(1,), (3,), ...,), (2,), ...]
E         At index 1 diff: (2,) != (3,)
E         Right contains 863 more items, first extra item: (712,)
E         Use -v to get the full diff

test_TP.py:143: AssertionError
_____________________________________ test_Q15_res _____________________________________

    def test_Q15_res ():
>       assert sol_Q15_res.upper() ==  Q15_res.upper()
E       assert "('SILLET', 'JACQUES', 1177)" == 'NOM,PRENOM,MONTANT'
E         - ('SILLET', 'JACQUES', 1177)
E         + NOM,PRENOM,MONTANT

test_TP.py:152: AssertionError
_____________________________________ test_Q15_req _____________________________________

    def test_Q15_req ():
>       assert requete(sol_Q15_req) == requete(Q15_req)
E       AssertionError: assert [('SILLET', 'Jacques', 1177)] == []
E         Left contains one more item: ('SILLET', 'Jacques', 1177)
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)" == 'NOM,PRENOM,MONTANT'
E         - ('GARREAU', 'PAUL', 22)
E         + NOM,PRENOM,MONTANT

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
======================== 10 failed, 12 passed in 0.59s =========================

MODIFICATIONS EFFECTUEES SUR LE FICHIER RENDU
=============================================

--- prog.py.orig        2020-06-22 08:23:48.000000000 +0200
+++ prog.py     2020-06-24 14:56:14.000000000 +0200
@@ -22,8 +22,7 @@
 Q5_res = "14"

 ## Question 6
-Q6_req = "SELECT CLI_NOM AS Noms, CLI_PRENOM AS Prénoms FROM T_CLIENT WHERE TIT
_CODE = 'Mme.' OR TIT_CODE = 'Melle.'
-ORDER BY CLI_NOM ASC;"
+Q6_req = "SELECT CLI_NOM AS Noms, CLI_PRENOM AS Prénoms FROM T_CLIENT WHERE TIT
_CODE = 'Mme.' OR TIT_CODE = 'Melle.' ORDER BY CLI_NOM ASC;"


 ## Question 7
@@ -49,16 +48,10 @@


 ## Question 13
-Q13_req = "SELECT DISTINCT CLI_ID from T_FACTURE
-JOIN T_LIGNE_FACTURE on T_LIGNE_FACTURE.FAC_ID=T_FACTURE.FAC_ID
-where LIF_REMISE_POURCENT>0 or LIF_REMISE_MONTANT>0;"
```

```
+Q13_req = "SELECT DISTINCT CLI_ID from T_FACTURE JOIN T_LIGNE_FACTURE on T_LIGN
E_FACTURE.FAC_ID=T_FACTURE.FAC_ID where LIF_REMISE_POURCENT>0 or LIF_REMISE_MONT
ANT>0;"

 ## Question 14
-Q14_req = "SELECT DISTINCT CLI_ID FROM T_FACTURE
-EXCEPT
-SELECT DISTINCT CLI_ID from T_FACTURE
-JOIN T_LIGNE_FACTURE on T_LIGNE_FACTURE.FAC_ID=T_FACTURE.FAC_ID
-where LIF_REMISE_POURCENT>0 or LIF_REMISE_MONTANT>0;"
+Q14_req = "SELECT DISTINCT CLI_ID FROM T_FACTURE EXCEPT SELECT DISTINCT CLI_ID
from T_FACTURE JOIN T_LIGNE_FACTURE on T_LIGNE_FACTURE.FAC_ID=T_FACTURE.FAC_ID w
here LIF_REMISE_POURCENT>0 or LIF_REMISE_MONTANT>0;"


 ## Question 15
```

```
NOM = ""
Prenom = "HUGO"
Classe = "MPSI 2"
alpha="58"

## 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 = "89"

## 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 = 'M
me.' OR TIT_CODE = 'Melle.' ;"


## Question 5
Q5_req = "SELECT count(*) FROM T_CLIENT WHERE TIT_CODE = 'Mme.' OR TIT_CODE = 'M
elle.';"
Q5_res = "14"

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


## Question 7
Q7_req = "SELECT CLI_NOM, TEL_NUMERO FROM T_CLIENT JOIN T_TELEPHONE ON T_CLIent.
CLI_ID=T_TELEPHONE.CLI_ID;"

## Question 8
Q8_req = "SELECT CLI_NOM FROM T_CLIENT GROUP BY CLI_NOM having count(CLI_NOM)>1;
"

## Question 9
Q9_req = "SELECT CLI_NOM, count(*) FROM T_CLIENT GROUP BY CLI_NOM having count(C
LI_NOM)>1;"
Q9_res = "2 pour BENATTAR et 3 pour MARTIN"

## Question 10
Q10_req = "SELECT avg(LIF_REMISE_MONTANT), avg(LIF_REMISE_POURCENT) FROM T_LIGNE
_FACTURE;"
Q10_res = "Pour le montant : 107.0 et Pour le pourcentage : 73.0"

## Question 11
Q11_req = "SELECT max(LIF_REMISE_MONTANT), max(LIF_REMISE_POURCENT) FROM T_LIGNE
_FACTURE;"
Q11_res = "Pour le montant : 107.0 et Pour le pourcentage : 73.0"

## 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 DISTINCT CLI_ID from T_FACTURE
JOIN T_LIGNE_FACTURE on T_LIGNE_FACTURE.FAC_ID=T_FACTURE.FAC_ID
where LIF_REMISE_POURCENT>0 or LIF_REMISE_MONTANT>0;"

## Question 14
Q14_req = "SELECT DISTINCT CLI_ID FROM T_FACTURE
EXCEPT
SELECT DISTINCT CLI_ID from T_FACTURE
```

```
JOIN T_LIGNE_FACTURE on T_LIGNE_FACTURE.FAC_ID=T_FACTURE.FAC_ID
where LIF_REMISE_POURCENT>0 or LIF_REMISE_MONTANT>0;"


## Question 15
Q15_req = ""
Q15_res ="nom,prenom,montant"
```

```
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_espinoza
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

test_TP.py F...F...FF.FFFFFFFFFFF                                        [100%]

=================================== FAILURES ===================================
_____________________________________ test_Q1_req _____________________________________

    def test_Q1_req ():
>       assert requete(sol_Q1_req) == requete(Q1_req)
E       AssertionError: assert [('DUPONT', '...', 'M.'), ...] == [('M.', 'DUPO..
. 'Paul'), ...]
E         At index 0 diff: ('DUPONT', 'Alain', 'M.') != ('M.', 'DUPONT', 'Alain'
)
E         Use -v to get the full diff

test_TP.py:98: AssertionError
_____________________________________ test_Q4_req _____________________________________

    def test_Q4_req ():
>       assert requete(sol_Q4_req) == requete(Q4_req)
E       AssertionError: assert [('DUHAMEL', ... 'Mme.'), ...] == [('DUHAMEL', ..
. 'Mme.'), ...]
E         At index 1 diff: ('DAUMIER', 'Amélie', 'Melle.') != ('BOYER', 'Martine
', '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', '...-52-56'), ...] == [('AIACH', '0..
.-05-37'), ...]
E         At index 0 diff: ('DUPONT', '01-45-42-56-63') != ('AIACH', '04-91-52-5
1-52')
E         Right contains 46 more items, first extra item: ('MOURGUES', '01-48-78
-30-69')
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', 'Marc')
E         Right contains 2 more items, first extra item: ('MARTIN', 'Martin')
E         Use -v to get the full diff

test_TP.py:125: AssertionError
_____________________________________ test_Q10_res _____________________________________

    def test_Q10_res ():
>       assert sol_Q10_res.upper() ==  Q10_res.upper()
E       AssertionError: assert '(77.0, 111.0)' == '111.0 | 77.0'
E         - (77.0, 111.0)
E         + 111.0 | 77.0
```

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

    def test_Q10_req ():
>       assert requete(sol_Q10_req) == requete(Q10_req)
E       assert [(77.0, 111.0)] == [(111.0, 77.0)]
E         At index 0 diff: (77.0, 111.0) != (111.0, 77.0)
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 '(77.0, 111)' == '111 | 77'
E         - (77.0, 111)
E         + 111 | 77

test_TP.py:137: AssertionError
_____________________________________ test_Q11_req _____________________________________

    def test_Q11_req ():
>       assert requete(sol_Q11_req) == requete(Q11_req)
E       assert [(77.0, 111)] == [(111, 77)]
E         At index 0 diff: (77.0, 111) != (111, 77)
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 925 more items, first extra item: (691,)
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,), (2,), ...,), (7,), ...] == [(1,), (1,), ...,), (6,), ...]
E         At index 1 diff: (2,) != (1,)
E         Right contains 55022 more items, first extra item: (100,)
E         Use -v to get the full diff

test_TP.py:146: AssertionError
_____________________________________ test_Q14_req _____________________________________

    def test_Q14_req ():
>       assert requete(sol_Q14_req) == requete(Q14_req)
E       assert [] == [(1,), (2,), ...,), (7,), ...]
E         Right contains 1329599 more items, first extra item: (1,)
E         Use -v to get the full diff

test_TP.py:149: AssertionError
_____________________________________ test_Q15_res _____________________________________

    def test_Q15_res ():
>       assert sol_Q15_res.upper() ==  Q15_res.upper()
E       assert "('SILLET', 'JACQUES', 1221)" == 'NOM,PRENOM,MONTANT'
E         - ('SILLET', 'JACQUES', 1221)
E         + NOM,PRENOM,MONTANT

test_TP.py:152: AssertionError
_____________________________________ test_Q15_req _____________________________________
```

```
    def test_Q15_req ():
>       assert requete(sol_Q15_req) == requete(Q15_req)
E       AssertionError: assert [('SILLET', 'Jacques', 1221)] == []
E         Left contains one more item: ('SILLET', 'Jacques', 1221)
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)" == 'NOM,PRENOM,MONTANT'
E         - ('GARREAU', 'PAUL', 22)
E         + NOM,PRENOM,MONTANT

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
========================== 15 failed, 7 passed in 2.42s ==========================

MODIFICATIONS EFFECTUEES SUR LE FICHIER RENDU
=============================================

--- prog.py.orig        2020-06-22 08:23:49.000000000 +0200
+++ prog.py     2020-06-24 14:56:17.000000000 +0200
@@ -56,5 +56,5 @@


 ## Question 15
-Q15_req = "SELECT CLI_NOM as "Nom", CLI_PRENOM as "Prénom" FROM T_LIGNE_FACTURE
,T_CLIENT WHERE LIF_REMISE_MONTANT = (SELECT max(lif_remise_montant) FROM T_LIGN
E_FACTURE) AND LIF_REMISE_POURCENT =( SELECT max(lif_remise_pourcent) FROM T_LIG
NE_FACTURE) and T_CLIENT.CLI_ID = T_LIGNE_FACTURE.FAC_ID"
+Q15_req = "SELECT CLI_NOM as 'Nom', CLI_PRENOM as 'Prénom' FROM T_LIGNE_FACTURE
,T_CLIENT WHERE LIF_REMISE_MONTANT = (SELECT max(lif_remise_montant) FROM T_LIGN
E_FACTURE) AND LIF_REMISE_POURCENT =( SELECT max(lif_remise_pourcent) FROM T_LIG
NE_FACTURE) and T_CLIENT.CLI_ID = T_LIGNE_FACTURE.FAC_ID"
 Q15_res ="nom,prenom,montant"
```

```
NOM = "Espinoza"
Prenom = "Walter"
Classe = "MPSI2"
alpha="62"

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

## Question 2
Q2_req = "SELECT count(*) FROM T_CLIENT"
Q2_res = "89"

## 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 != '
M.'"


## Question 5
Q5_req = "SELECT count(*) FROM (SELECT TIT_CODE, CLI_PRENOM from T_CLIENT WHERE
TIT_CODE != 'M.')"
Q5_res = "16"

## Question 6
Q6_req = "SELECT CLI_NOM as Noms, CLI_PRENOM as Prenoms from T_CLIENT WHERE TIT_
CODE != 'M.' ORDER by Noms "


## Question 7
Q7_req = "SELECT CLI_NOM AS Nom, TEL_NUMERO AS Téléphone FROM T_CLIENT, T_TELEPH
ONE WHERE T_CLIENT.CLI_ID=T_TELEPHONE.CLI_ID ORDER BY CLI_NOM "

## Question 8
Q8_req = "SELECT T_CLIENT.CLI_NOM, T_CLIENT.CLI_PRENOM FROM T_CLIENT WHERE T_CLI
ENT.CLI_NOM = (SELECT T_CLIENT.CLI_NOM FROM T_CLIENT GROUP by T_CLIENT.CLI_NOM H
AVING  count(CLI_NOM)>1)"

## Question 9
Q9_req = "SELECT T_CLIENT.CLI_NOM, count(CLI_NOM) FROM T_CLIENT WHERE T_CLIENT.C
LI_NOM = (SELECT T_CLIENT.CLI_NOM FROM T_CLIENT GROUP by T_CLIENT.CLI_NOM HAVING
 count(CLI_NOM)>1)"
Q9_res = "3"

## Question 10
Q10_req = "SELECT avg(LIF_REMISE_MONTANT) ,avg(LIF_REMISE_POURCENT) from T_LIGNE
_FACTURE"
Q10_res = "111.0 | 77.0"

## Question 11
Q11_req = "SELECT max(LIF_REMISE_MONTANT) ,max(LIF_REMISE_POURCENT) from T_LIGNE
_FACTURE"
Q11_res = "111 | 77"

## 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_LIGNE_FACTURE,T_CLIENT WHERE LIF_REMISE_MONTANT>
0 OR LIF_REMISE_POURCENT>0 AND T_CLIENT.CLI_ID = T_LIGNE_FACTURE.FAC_ID"

## Question 14
Q14_req = "SELECT CLI_ID FROM T_LIGNE_FACTURE,T_CLIENT WHERE LIF_REMISE_MONTANT
is NULL OR LIF_REMISE_POURCENT is NULL AND T_CLIENT.CLI_ID = T_LIGNE_FACTURE.FAC
```

```
_ID"


## Question 15
Q15_req = "SELECT CLI_NOM as "Nom", CLI_PRENOM as "Prénom" FROM T_LIGNE_FACTURE,
T_CLIENT WHERE LIF_REMISE_MONTANT = (SELECT max(lif_remise_montant) FROM T_LIGNE
_FACTURE) AND LIF_REMISE_POURCENT =( SELECT max(lif_remise_pourcent) FROM T_LIGN
E_FACTURE) and T_CLIENT.CLI_ID = T_LIGNE_FACTURE.FAC_ID"
Q15_res ="nom,prenom,montant"
```

```
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_faure
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

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

=================================== FAILURES ===================================
_____________________________________ test_Q1_req _____________________________________

    def test_Q1_req ():
>       assert requete(sol_Q1_req) == requete(Q1_req)
E       AssertionError: assert [('MARTIN', '...', 'M.'), ...] == [('M.', 'MART..
. 'Paul'), ...]
E         At index 0 diff: ('MARTIN', 'Marc', 'M.') != ('M.', 'MARTIN', 'Marc')
E         Use -v to get the full diff

test_TP.py:98: AssertionError
_____________________________________ test_Q7_req _____________________________________

    def test_Q7_req ():
>       assert requete(sol_Q7_req) == requete(Q7_req)
E       AssertionError: assert [('DUBOIS', '...-87-87'), ...] == [('BOUVIER', ..
.-92-21'), ...]
E         At index 0 diff: ('DUBOIS', '02-41-58-89-52') != ('BOUVIER', '06-11-86
-78-89')
E         Right contains 43 more items, first extra item: ('CHAMBON', '05-59-03-
54-51')
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 [('BENATTAR',), ('MARTIN',)] == [('BENATTAR',...'
, 'Bernard')]
E         At index 0 diff: ('BENATTAR',) != ('BENATTAR', '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 [('BENATTAR',...('MARTIN', 3)] == [('BENATTAR', 2
)]
E         Left contains one more item: ('MARTIN', 3)
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 '(84.0, 118.0)' == '84.0, 118.0'
E         - (84.0, 118.0)
E         ? -           -
E         + 84.0, 118.0

test_TP.py:131: AssertionError
```

```
_____________________________________ test_Q11_res _____________________________________

    def test_Q11_res ():
>       assert sol_Q11_res.upper() ==  Q11_res.upper()
E       AssertionError: assert '(84.0, 118)' == '84, 118'
E         - (84.0, 118)
E         ? -  --     -
E         + 84, 118

test_TP.py:137: 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 925 more items, first extra item: (691,)
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 [(2,), (3,), ...,), (7,), ...] == []
E         Left contains 90 more items, first extra item: (2,)
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', 1416)" == 'NOM,PRENOM,MONTANT'
E         - ('MEDARD', 'JACQUES', 1416)
E         + NOM,PRENOM,MONTANT

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', 1416)] == []
E         Left contains one more item: ('MEDARD', 'Jacques', 1416)
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)" == 'NOM,PRENOM,MONTANT'
E         - ('GARREAU', 'PAUL', 22)
E         + NOM,PRENOM,MONTANT

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
======================== 12 failed, 10 passed in 2.76s =========================

MODIFICATIONS EFFECTUEES SUR LE FICHIER RENDU
```

```
==========================================

--- prog.py.orig        2020-06-22 08:23:51.000000000 +0200
+++ prog.py     2020-06-24 14:56:22.000000000 +0200
@@ -11,18 +11,18 @@
 Q2_res = "90"

 ## Question 3
-Q3_req = "SELECT CLI_NOM, CLI_PRENOM FROM T_CLIENT WHERE TIT_CODE = "Mme.""
+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." OR TIT_CODE = "Melle.""
+Q4_req = "SELECT CLI_NOM, CLI_PRENOM, TIT_CODE FROM T_CLIENT WHERE TIT_CODE = '
Mme.' OR TIT_CODE = 'Melle.'"


 ## Question 5
-Q5_req = "SELECT count(CLI_ID) FROM T_CLIENT WHERE TIT_CODE = "Mme." OR TIT_COD
E = "Melle.""
+Q5_req = "SELECT count(CLI_ID) FROM T_CLIENT WHERE TIT_CODE = 'Mme.' OR TIT_COD
E = 'Melle.'"
 Q5_res = "15"

 ## Question 6
-Q6_req = "SELECT CLI_NOM as Noms, CLI_PRENOM as Prénoms FROM T_CLIENT WHERE TIT
_CODE = "Mme." OR TIT_CODE = "Melle." ORDER BY CLI_NOM ASC, CLI_PRENOM ASC"
+Q6_req = "SELECT CLI_NOM as Noms, CLI_PRENOM as Prénoms FROM T_CLIENT WHERE TIT
_CODE = 'Mme.' OR TIT_CODE = 'Melle.' ORDER BY CLI_NOM ASC, CLI_PRENOM ASC"


 ## Question 7
```

```
NOM = "FAURE"
Prenom = "Benoit"
Classe = "MPSI2"
alpha="69"

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

## Question 2
Q2_req = "SELECT count(CLI_ID) FROM T_CLIENT"
Q2_res = "90"

## 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 = "M
me." OR TIT_CODE = "Melle.""


## Question 5
Q5_req = "SELECT count(CLI_ID) FROM T_CLIENT WHERE TIT_CODE = "Mme." OR TIT_CODE
 = "Melle.""
Q5_res = "15"

## Question 6
Q6_req = "SELECT CLI_NOM as Noms, CLI_PRENOM as Prénoms 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, T_TELEPHONE WHERE T_CLIENT.C
LI_ID = T_TELEPHONE.CLI_ID"

## Question 8
Q8_req = "SELECT CLI_NOM, CLI_PRENOM FROM T_CLIENT WHERE CLI_NOM = (SELECT CLI_N
OM FROM T_CLIENT GROUP BY CLI_NOM HAVING count(CLI_NOM)>1)"

## Question 9
Q9_req = "SELECT CLI_NOM, count(CLI_PRENOM) FROM T_CLIENT WHERE CLI_NOM = (SELEC
T CLI_NOM FROM T_CLIENT GROUP BY CLI_NOM HAVING count(CLI_NOM)>1)"
Q9_res = "2"

## Question 10
Q10_req = "SELECT AVG(LIF_REMISE_POURCENT), AVG(LIF_REMISE_MONTANT) FROM T_LIGNE
_FACTURE"
Q10_res = "84.0, 118.0"

## Question 11
Q11_req = "SELECT MAX(LIF_REMISE_POURCENT), MAX(LIF_REMISE_MONTANT) FROM T_LIGNE
_FACTURE"
Q11_res = "84, 118"

## Question 12
Q12_req = "SELECT FAC_ID as fac_id1 FROM T_LIGNE_FACTURE WHERE LIF_REMISE_MONTAN
T IS NOT NULL or LIF_REMISE_POURCENT IS NOT NULL"

## Question 13
Q13_req = "SELECT CLI_ID FROM T_FACTURE WHERE FAC_ID = (SELECT FAC_ID FROM T_LIG
NE_FACTURE WHERE LIF_REMISE_MONTANT IS NOT NULL or LIF_REMISE_POURCENT IS NOT NU
LL) GROUP BY CLI_ID"

## Question 14
Q14_req = "SELECT CLI_ID FROM T_FACTURE WHERE FAC_ID = (SELECT FAC_ID FROM T_LIG
NE_FACTURE WHERE LIF_REMISE_MONTANT IS NULL or LIF_REMISE_POURCENT IS NULL) GROU
P BY CLI_ID"
```

```
## Question 15
Q15_req = ""
Q15_res ="nom,prenom,montant"
```

```
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_fortin
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

test_TP.py ....F...FF.F.F.FF.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..
. 'Mme.'), ...]
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', '...-87-87'), ...] == [('DUPONT', '..
.-42-95'), ...]
E         At index 2 diff: ('DUHAMEL', '01-54-11-43-21') != ('DUPONT', '01-44-28
-52-50')
E         Right contains 44 more items, first extra item: ('AIACH', '04-91-52-51
-52')
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', 'Marc')
E         Right contains 2 more items, first extra item: ('MARTIN', 'Martin')
E         Use -v to get the full diff

test_TP.py:125: AssertionError
_____________________________________ test_Q10_res _____________________________________

    def test_Q10_res ():
>       assert sol_Q10_res.upper() ==  Q10_res.upper()
E       AssertionError: assert '(99.0, 133.0)' == 'REMISES EN P...NTANT = 133.0'
E         - (99.0, 133.0)
E         + REMISES EN POURCENTAGE = 99.0, REMISES EN MONTANT = 133.0

test_TP.py:131: AssertionError
_____________________________________ test_Q11_res _____________________________________

    def test_Q11_res ():
>       assert sol_Q11_res.upper() ==  Q11_res.upper()
E       AssertionError: assert '(99.0, 133)' == 'REMISES EN P...NTANT = 133.0'
E         - (99.0, 133)
E         + REMISES EN POURCENTAGE = 99.0, REMISES EN MONTANT = 133.0

test_TP.py:137: AssertionError
_____________________________________ test_Q12_req _____________________________________
```

```
    def test_Q12_req ():
>       assert requete(sol_Q12_req) == requete(Q12_req)

test_TP.py:143:
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

req = 'SELECT FAC_ID as fac_id1 FROM T_LIGNE_FACTURE WHERE LIF_REMISE_MONTANT >
0 UNION SELECT FAC_ID, LIF_REMISE_MONTANT, LIF_REMISE_POURCENT as fac_id1 FROM T
_LIGNE_FACTURE WHERE LIF_REMISE_POURCENT > 0;'

    def requete (req):
        conn = sqlite3.connect('../../bdd/hotel_'+convert(alpha)+'.db')
        c=conn.cursor()
>       c.execute(req)
E       sqlite3.OperationalError: SELECTs to the left and right of UNION do not
have the same number of result columns

test_TP.py:25: OperationalError
_________________________________ test_Q13_req _________________________________

    def test_Q13_req ():
>       assert requete(sol_Q13_req) == requete(Q13_req)
E       assert [(1,), (2,), ...,), (8,), ...] == []
E         Left contains 86 more items, first extra item: (1,)
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 "('SILLET', 'JACQUES', 1463)" == 'NOM,PRENOM,MONTANT'
E         - ('SILLET', 'JACQUES', 1463)
E         + NOM,PRENOM,MONTANT

test_TP.py:152: AssertionError
_________________________________ test_Q15_req _________________________________

    def test_Q15_req ():
>       assert requete(sol_Q15_req) == requete(Q15_req)
E       AssertionError: assert [('SILLET', 'Jacques', 1463)] == []
E         Left contains one more item: ('SILLET', 'Jacques', 1463)
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)" == 'NOM,PRENOM,MONTANT'
E         - ('GARREAU', 'PAUL', 22)
E         + NOM,PRENOM,MONTANT

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
======================== 11 failed, 11 passed in 1.50s =========================
```

```
NOM = "FORTIN"
Prenom = "Côme"
Classe = "MPSI2"
alpha="84"

## 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 = "86"

## 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 = 'M
me.' UNION SELECT CLI_NOM, CLI_PRENOM, TIT_CODE FROM T_CLIENT WHERE TIT_CODE = '
Melle.';"


## Question 5
Q5_req = "SELECT count(*) as nbr_clientes FROM (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.');"
Q5_res = "15"

## Question 6
Q6_req = "SELECT CLI_NOM as Noms, CLI_PRENOM as Prénoms FROM (SELECT CLI_NOM, CL
I_PRENOM, TIT_CODE FROM T_CLIENT WHERE TIT_CODE = 'Mme.' UNION SELECT CLI_NOM, C
LI_PRENOM, TIT_CODE FROM T_CLIENT WHERE TIT_CODE = 'Melle.') ORDER by CLI_NOM AS
C, CLI_PRENOM ASC;"


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

## Question 8
Q8_req = "SELECT T_CLIENT.CLI_NOM, T_CLIENT.CLI_PRENOM FROM T_CLIENT WHERE T_CLI
ENT.CLI_NOM = (SELECT T_CLIENT.CLI_NOM FROM T_CLIENT GROUP by T_CLIENT.CLI_NOM H
AVING count(CLI_NOM) >=2);"

## Question 9
Q9_req = "SELECT CLI_NOM, count(*) as même_nom FROM T_CLIENT GROUP by CLI_NOM HA
VING même_nom >=2;"
Q9_res = "Martin = 3"

## Question 10
Q10_req = "SELECT avg(LIF_REMISE_POURCENT) as moyenne_pourcent, avg(LIF_REMISE_M
ONTANT) as moyenne_montant FROM T_LIGNE_FACTURE;"
Q10_res = "Remises en pourcentage = 99.0, Remises en montant = 133.0"

## Question 11
Q11_req = "SELECT max(LIF_REMISE_POURCENT) as max_pourcent, max(LIF_REMISE_MONTA
NT) as max_montant FROM T_LIGNE_FACTURE;"
Q11_res = "Remises en pourcentage = 99.0, Remises en montant = 133.0"

## Question 12
Q12_req = "SELECT FAC_ID as fac_id1 FROM T_LIGNE_FACTURE WHERE LIF_REMISE_MONTAN
T > 0 UNION SELECT FAC_ID, LIF_REMISE_MONTANT, LIF_REMISE_POURCENT as fac_id1 FR
OM T_LIGNE_FACTURE WHERE LIF_REMISE_POURCENT > 0;"


## Question 13
Q13_req = ""

## Question 14
```

```
Q14_req = ""


## Question 15
Q15_req = ""
Q15_res ="nom,prenom,montant"
```

```
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_frey
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

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

=================================== FAILURES ===================================
_____________________________________ test_Q7_req _____________________________________

    def test_Q7_req ():
>       assert requete(sol_Q7_req) == requete(Q7_req)
E       AssertionError: assert [('DUPONT', '...-92-21'), ...] == [('DUPONT', '..
.-52-50'), ...]
E         At index 1 diff: ('DUPONT', '01-44-28-52-52') != ('MARTIN', '01-44-28-
52-52')
E         Left contains 25 more items, first extra item: ('ROUSSILLON', '01-47-4
9-49-94')
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 [('BENATTAR',), ('MARTIN',)] == [('MARTIN', '...'
, 'Bernard')]
E         At index 0 diff: ('BENATTAR',) != ('MARTIN', 'Marc')
E         Right contains 3 more items, first extra item: ('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 [('BENATTAR',...('MARTIN', 3)] == [(2, 'BENATTA..
.(3, 'MARTIN')]
E         At index 0 diff: ('BENATTAR', 2) != (2, 'BENATTAR')
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 '(19.0, 53.0)' == '19.0 ; 53.0'
E         - (19.0, 53.0)
E         ? -    ^     -
E         + 19.0 ; 53.0
E         ?     ^^

test_TP.py:131: AssertionError
_____________________________________ test_Q11_res _____________________________________

    def test_Q11_res ():
>       assert sol_Q11_res.upper() ==  Q11_res.upper()
E       AssertionError: assert '(19.0, 53)' == '19 ; 53'
E         - (19.0, 53)
E         + 19 ; 53
```

```
test_TP.py:137: AssertionError
_____________________________________ test_Q13_req _____________________________________

    def test_Q13_req ():
>       assert requete(sol_Q13_req) == requete(Q13_req)
E       assert [(1,), (2,), ...,), (6,), ...] == [(1,), (2,), ...,), (6,), ...]
E         At index 95 diff: (99,) != (98,)
E         Right contains 331 more items, first extra item: (100,)
E         Use -v to get the full diff

test_TP.py:146: AssertionError
_____________________________________ test_Q14_req _____________________________________

    def test_Q14_req ():
>       assert requete(sol_Q14_req) == requete(Q14_req)
E       assert [] == [(5,), (6,), ...), (10,), ...]
E         Right contains 80 more items, first extra item: (5,)
E         Use -v to get the full diff

test_TP.py:149: AssertionError
_____________________________________ test_Q15_res _____________________________________

    def test_Q15_res ():
>       assert sol_Q15_res.upper() ==  Q15_res.upper()
E       assert "('SILLET', 'JACQUES', 583)" == 'NOM,PRENOM,MONTANT'
E         - ('SILLET', 'JACQUES', 583)
E         + NOM,PRENOM,MONTANT

test_TP.py:152: AssertionError
_____________________________________ test_Q15_req _____________________________________

    def test_Q15_req ():
>       assert requete(sol_Q15_req) == requete(Q15_req)
E       AssertionError: assert [('SILLET', 'Jacques', 583)] == []
E         Left contains one more item: ('SILLET', 'Jacques', 583)
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 "('THOMASSE',...-CLAUDE', 20)" == 'NOM,PRENOM,MONTANT'
E         - ('THOMASSE', 'JEAN-CLAUDE', 20)
E         + NOM,PRENOM,MONTANT

test_TP.py:158: AssertionError
_____________________________________ test_Q15_req2 _____________________________________

    def test_Q15_req2 ():
>       assert requete(sol_Q15_req2) == requete(Q15_req)
E       AssertionError: assert [('THOMASSE',...-Claude', 20)] == []
E         Left contains one more item: ('THOMASSE', 'Jean-Claude', 20)
E         Use -v to get the full diff

test_TP.py:161: AssertionError
======================== 11 failed, 11 passed in 0.59s =========================

MODIFICATIONS EFFECTUEES SUR LE FICHIER RENDU
=============================================

--- prog.py.orig        2020-06-22 08:23:54.000000000 +0200
+++ prog.py     2020-06-24 14:56:37.000000000 +0200
@@ -1,93 +1,57 @@
 NOM = "FREY"
 Prenom = "Elsa"
 Classe = "MPSI2"
```

```
-alpha="04"
+alpha="4"

 ## Question 1
-Q1_req = "Select Distinct CLI_NOM, CLI_PRENOM,TIT_CODE
-from T_CLIENT;"
+Q1_req = "Select Distinct CLI_NOM, CLI_PRENOM,TIT_CODE from T_CLIENT;"

 ## Question 2
-Q2_req = "Select Count(*)
-from T_CLIENT;"
+Q2_req = "Select Count(*) from T_CLIENT;"
 Q2_res = "97"

 ## Question 3
-Q3_req = "Select CLI_NOM, CLI_PRENOM
-from T_CLIENT
-Where TIT_CODE='Mme.';"
+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='Melle.' or TIT_CODE='Mme.';"
+Q4_req = "Select CLI_NOM, CLI_PRENOM, TIT_CODE from T_CLIENT Where TIT_CODE='Me
lle.' or TIT_CODE='Mme.';"


 ## Question 5
-Q5_req = "Select Count(*)
-from T_CLIENT
-Where TIT_CODE='Melle.' or TIT_CODE='Mme.';"
+Q5_req = "Select Count(*) from T_CLIENT Where TIT_CODE='Melle.' or TIT_CODE='Mm
e.';"
 Q5_res = "17"

 ## Question 6
-Q6_req = "
-Select CLI_NOM AS Noms , CLI_PRENOM as Prénoms
-from T_CLIENT
-Where TIT_CODE='Melle.' or TIT_CODE='Mme.'
-Order by Noms ASC, Prénoms asc;"
+Q6_req = "Select CLI_NOM AS Noms , CLI_PRENOM as Prénoms from T_CLIENT Where TI
T_CODE='Melle.' or TIT_CODE='Mme.' Order by Noms ASC, Prénoms asc;"


 ## Question 7
-Q7_req = "Select T_CLIENT.CLI_NOM as Noms, T_TELEPHONE.TEL_NUMERO as num_tel
-from T_CLIENT, T_TELEPHONE
-Where T_CLIENT.CLI_ID=T_TELEPHONE.TEL_ID;"
+Q7_req = "Select T_CLIENT.CLI_NOM as Noms, T_TELEPHONE.TEL_NUMERO as num_tel fr
om T_CLIENT, T_TELEPHONE Where T_CLIENT.CLI_ID=T_TELEPHONE.TEL_ID;"

 ## Question 8
-Q8_req = "SELECT   CLI_NOM, CLI_PRENOM
-FROM     T_CLIENT
-Where CLI_NOM='BENATTAR' or CLI_NOM='MARTIN';"
+Q8_req = "SELECT CLI_NOM, CLI_PRENOM FROM T_CLIENT Where CLI_NOM='BENATTAR' or
CLI_NOM='MARTIN';"

 ## Question 9
-Q9_req = "SELECT   COUNT(*) AS nbr_doublon, CLI_NOM
-FROM     T_CLIENT
-GROUP BY CLI_NOM
-HAVING   COUNT(*) > 1;"
-Q9_res = "Benattar:2
-Martin:3"
+Q9_req = "SELECT   COUNT(*) AS nbr_doublon, CLI_NOM FROM T_CLIENT GROUP BY CLI_
```

```
NOM HAVING   COUNT(*) > 1;"
+Q9_res = "Benattar:2 Martin:3"

 ## Question 10
-Q10_req = "Select AVG(LIF_REMISE_POURCENT),AVG(LIF_REMISE_MONTANT)
-from T_LIGNE_FACTURE;
-"
+Q10_req = "Select AVG(LIF_REMISE_POURCENT),AVG(LIF_REMISE_MONTANT) from T_LIGNE
_FACTURE;"
 Q10_res = "19.0 ; 53.0"

 ## Question 11
-Q11_req = "
-Select MAX(LIF_REMISE_POURCENT),MAX(LIF_REMISE_MONTANT)
-from T_LIGNE_FACTURE;"
+Q11_req = " Select MAX(LIF_REMISE_POURCENT),MAX(LIF_REMISE_MONTANT) from T_LIGN
E_FACTURE;"
 Q11_res = "19 ; 53"

 ## Question 12
-Q12_req = "Select distinct FAC_ID as fac_id1
-from T_LIGNE_FACTURE
-Where LIF_REMISE_MONTANT not null or LIF_REMISE_POURCENT not null;"
+Q12_req = "Select distinct FAC_ID as fac_id1 from T_LIGNE_FACTURE Where LIF_REM
ISE_MONTANT not null or LIF_REMISE_POURCENT not null;"


 ## Question 13
-Q13_req = "Select distinct CLI_ID
-from T_FACTURE
-Union
-Select distinct FAC_ID as fac_id1
-from T_LIGNE_FACTURE
-Where LIF_REMISE_MONTANT not null or LIF_REMISE_POURCENT not null;"
+Q13_req = "Select distinct CLI_ID from T_FACTURE Union Select distinct FAC_ID a
s fac_id1 from T_LIGNE_FACTURE Where LIF_REMISE_MONTANT not null or LIF_REMISE_P
OURCENT not null;"

 ## Question 14
-Q14_req = "Select distinct CLI_ID
-from T_FACTURE
-Except
-Select distinct FAC_ID as fac_id1
-from T_LIGNE_FACTURE
-Where LIF_REMISE_MONTANT not null or LIF_REMISE_POURCENT not null;"
+Q14_req = "Select distinct CLI_ID from T_FACTURE Except Select distinct FAC_ID
as fac_id1 from T_LIGNE_FACTURE Where LIF_REMISE_MONTANT not null or LIF_REMISE_
POURCENT not null;"


 ## Question 15
```

```
NOM = "FREY"
Prenom = "Elsa"
Classe = "MPSI2"
alpha="04"

## Question 1
Q1_req = "Select Distinct CLI_NOM, CLI_PRENOM,TIT_CODE
from T_CLIENT;"

## Question 2
Q2_req = "Select Count(*)
from T_CLIENT;"
Q2_res = "97"

## 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='Melle.' or TIT_CODE='Mme.';"


## Question 5
Q5_req = "Select Count(*)
from T_CLIENT
Where TIT_CODE='Melle.' or TIT_CODE='Mme.';"
Q5_res = "17"

## Question 6
Q6_req = "
Select CLI_NOM AS Noms , CLI_PRENOM as Prénoms
from T_CLIENT
Where TIT_CODE='Melle.' or TIT_CODE='Mme.'
Order by Noms ASC, Prénoms asc;"


## Question 7
Q7_req = "Select T_CLIENT.CLI_NOM as Noms, T_TELEPHONE.TEL_NUMERO as num_tel
from T_CLIENT, T_TELEPHONE
Where T_CLIENT.CLI_ID=T_TELEPHONE.TEL_ID;"

## Question 8
Q8_req = "SELECT   CLI_NOM, CLI_PRENOM
FROM     T_CLIENT
Where CLI_NOM='BENATTAR' or CLI_NOM='MARTIN';"

## Question 9
Q9_req = "SELECT   COUNT(*) AS nbr_doublon, CLI_NOM
FROM     T_CLIENT
GROUP BY CLI_NOM
HAVING   COUNT(*) > 1;"
Q9_res = "Benattar:2
Martin:3"

## Question 10
Q10_req = "Select AVG(LIF_REMISE_POURCENT),AVG(LIF_REMISE_MONTANT)
from T_LIGNE_FACTURE;
"
Q10_res = "19.0 ; 53.0"

## Question 11
Q11_req = "
Select MAX(LIF_REMISE_POURCENT),MAX(LIF_REMISE_MONTANT)
from T_LIGNE_FACTURE;"
Q11_res = "19 ; 53"
```

```
## Question 12
Q12_req = "Select distinct FAC_ID as fac_id1
from T_LIGNE_FACTURE
Where LIF_REMISE_MONTANT not null or LIF_REMISE_POURCENT not null;"


## Question 13
Q13_req = "Select distinct CLI_ID
from T_FACTURE
Union
Select distinct FAC_ID as fac_id1
from T_LIGNE_FACTURE
Where LIF_REMISE_MONTANT not null or LIF_REMISE_POURCENT not null;"

## Question 14
Q14_req = "Select distinct CLI_ID
from T_FACTURE
Except
Select distinct FAC_ID as fac_id1
from T_LIGNE_FACTURE
Where LIF_REMISE_MONTANT not null or LIF_REMISE_POURCENT not null;"


## Question 15
Q15_req = ""
Q15_res ="nom,prenom,montant"
```

```
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_gras
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

test_TP.py ...F....FFFFFFFF.FFFFF                                        [100%]

=================================== FAILURES ===================================
_____________________________________ test_Q3_req _____________________________________

    def test_Q3_req ():
>       assert requete(sol_Q3_req) == requete(Q3_req)
E       AssertionError: assert [('BOYER', 'M...ueline'), ...] == [('BOYER', 'M..
. 'Mme.'), ...]
E         At index 0 diff: ('BOYER', 'Martine') != ('BOYER', 'Martine', 'Mme.')
E         Use -v to get the full diff

test_TP.py:107: AssertionError
_____________________________________ test_Q7_req _____________________________________

    def test_Q7_req ():
>       assert requete(sol_Q7_req) == requete(Q7_req)
E       AssertionError: assert [('DUPONT', '...-92-21'), ...] == [('DUPONT', '..
.-52-50'), ...]
E         At index 2 diff: ('DUBOIS', '02-41-58-89-52') != ('DUPONT', '01-44-28-
52-50')
E         Right contains 48 more items, first extra item: ('AIACH', '04-91-52-51
-52')
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 [('BENATTAR',), ('MARTIN',)] == []
E         Left contains 2 more items, first extra item: ('BENATTAR',)
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 [('BENATTAR',...('MARTIN', 3)] == [(1, 'AIACH')..
.EAUNEE'), ...]
E         At index 0 diff: ('BENATTAR', 2) != (1, 'AIACH')
E         Right contains 88 more items, first extra item: (1, 'AUZENAT')
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 '(45.0, 79.0)' == '79.0\t45.0'
E         - (45.0, 79.0)
E         + 79.0        45.0

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

```
    def test_Q10_req ():
>       assert requete(sol_Q10_req) == requete(Q10_req)
E       assert [(45.0, 79.0)] == [(79.0, 45.0)]
E         At index 0 diff: (45.0, 79.0) != (79.0, 45.0)
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 '(45.0, 79)' == '79\t45'
E         - (45.0, 79)
E         + 79  45

test_TP.py:137: AssertionError
_____________________________________ test_Q11_req _____________________________________

    def test_Q11_req ():
>       assert requete(sol_Q11_req) == requete(Q11_req)
E       assert [(45.0, 79)] == [(79, 45)]
E         At index 0 diff: (45.0, 79) != (79, 45)
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 876 more items, first extra item: (714,)
E         Use -v to get the full diff

test_TP.py:143: AssertionError
_____________________________________ test_Q14_req _____________________________________

    def test_Q14_req ():
>       assert requete(sol_Q14_req) == requete(Q14_req)
E       assert [] == [(5,), (6,), ...), (10,), ...]
E         Right contains 77 more items, first extra item: (5,)
E         Use -v to get the full diff

test_TP.py:149: AssertionError
_____________________________________ test_Q15_res _____________________________________

    def test_Q15_res ():
>       assert sol_Q15_res.upper() ==  Q15_res.upper()
E       assert "('BOUCHET', 'MICHEL', 790)" == 'NOM,PRENOM,MONTANT'
E         - ('BOUCHET', 'MICHEL', 790)
E         + NOM,PRENOM,MONTANT

test_TP.py:152: AssertionError
_____________________________________ test_Q15_req _____________________________________

    def test_Q15_req ():
>       assert requete(sol_Q15_req) == requete(Q15_req)
E       AssertionError: assert [('BOUCHET', 'Michel', 790)] == []
E         Left contains one more item: ('BOUCHET', 'Michel', 790)
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 "('LETERRIER', 'MONIQUE', 21)" == 'NOM,PRENOM,MONTANT'
```

```
E         - ('LETERRIER', 'MONIQUE', 21)
E         + NOM,PRENOM,MONTANT

test_TP.py:158: AssertionError
_____________________________ test_Q15_req2 _____________________________

    def test_Q15_req2 ():
>       assert requete(sol_Q15_req2) == requete(Q15_req)
E       AssertionError: assert [('LETERRIER', 'Monique', 21)] == []
E         Left contains one more item: ('LETERRIER', 'Monique', 21)
E         Use -v to get the full diff

test_TP.py:161: AssertionError
======================== 14 failed, 8 passed in 0.68s ========================

MODIFICATIONS EFFECTUEES SUR LE FICHIER RENDU
=============================================

--- prog.py.orig        2020-06-22 08:23:55.000000000 +0200
+++ prog.py     2020-06-24 14:56:40.000000000 +0200
@@ -11,18 +11,18 @@
 Q2_res = "93"

 ## Question 3
-Q3_req = "SELECT CLI_NOM,CLI_PRENOM,TIT_CODE FROM T_CLIENT WHERE TIT_CODE="Mme.
""
+Q3_req = "SELECT CLI_NOM,CLI_PRENOM,TIT_CODE 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.
" OR TIT_CODE="Melle.""
+Q4_req = "SELECT CLI_NOM,CLI_PRENOM,TIT_CODE FROM T_CLIENT WHERE TIT_CODE='Mme.
' OR TIT_CODE='Melle.'"


 ## Question 5
-Q5_req = "SELECT Count(*) FROM T_CLIENT WHERE TIT_CODE="Mme." OR TIT_CODE="Mell
e.""
+Q5_req = "SELECT Count(*) FROM T_CLIENT WHERE TIT_CODE='Mme.' OR TIT_CODE='Mell
e.'"
 Q5_res = "16"

 ## Question 6
-Q6_req = "SELECT CLI_NOM AS Noms, CLI_PRENOM AS Prénoms FROM T_CLIENT WHERE TIT
_CODE="Mme." OR TIT_CODE="Melle." ORDER BY Noms, Prénoms"
+Q6_req = "SELECT CLI_NOM AS Noms, CLI_PRENOM AS Prénoms FROM T_CLIENT WHERE TIT
_CODE='Mme.' OR TIT_CODE='Melle.' ORDER BY Noms, Prénoms"


 ## Question 7
@@ -44,14 +44,14 @@
 Q11_res = "79  45"

 ## Question 12
-Q12_req = "SELECT FAC_ID AS fac_id1 FROM T_LIGNE_FACTURE WHERE LIF_REMISE_POURC
ENT != "NULL" OR LIF_REMISE_MONTANT IS NOT NULL"
+Q12_req = "SELECT FAC_ID AS fac_id1 FROM T_LIGNE_FACTURE WHERE LIF_REMISE_POURC
ENT != 'NULL' OR LIF_REMISE_MONTANT IS NOT NULL"


 ## Question 13
 Q13_req = "SELECT DISTINCT T_FACTURE.CLI_ID FROM T_LIGNE_FACTURE, T_FACTURE WHE
RE (LIF_REMISE_POURCENT IS NOT NULL OR LIF_REMISE_MONTANT IS NOT NULL) AND T_LIG
NE_FACTURE.FAC_ID= T_FACTURE.FAC_ID;"

 ## Question 14
-Q14_req = "SELECT CLI_ID FROM T_CLIENT EXCEPT SELECT CLI_ID FROM T_LIGNE_FACTUR
```

```
E, T_CLIENT WHERE (LIF_REMISE_POURCENT != "NULL" OR LIF_REMISE_MONTANT != "NULL"
) AND T_LIGNE_FACTURE.LIF_ID= T_CLIENT.CLI_ID"
+Q14_req = "SELECT CLI_ID FROM T_CLIENT EXCEPT SELECT CLI_ID FROM T_LIGNE_FACTUR
E, T_CLIENT WHERE (LIF_REMISE_POURCENT != 'NULL' OR LIF_REMISE_MONTANT != 'NULL'
) AND T_LIGNE_FACTURE.LIF_ID= T_CLIENT.CLI_ID"


 ## Question 15
```

```
NOM = "GRAS"
Prenom = "Romain"
Classe = "MPSI2"
alpha="30"

## 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 = "93"

## Question 3
Q3_req = "SELECT CLI_NOM,CLI_PRENOM,TIT_CODE 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."
 OR TIT_CODE="Melle.""


## Question 5
Q5_req = "SELECT Count(*) FROM T_CLIENT WHERE TIT_CODE="Mme." OR TIT_CODE="Melle
."
Q5_res = "16"

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


## Question 7
Q7_req = "SELECT CLI_NOM, TEL_NUMERO FROM T_TELEPHONE, T_CLIENT WHERE T_TELEPHON
E.CLI_ID=T_CLIENT.CLI_ID"

## Question 8
Q8_req = ""

## Question 9
Q9_req = "SELECT COUNT(CLI_NOM), CLI_NOM FROM T_CLIENT GROUP BY CLI_NOM"
Q9_res = ""

## Question 10
Q10_req = "SELECT AVG(LIF_REMISE_MONTANT), AVG(LIF_REMISE_POURCENT) FROM T_LIGNE
_FACTURE;"
Q10_res = "79.0 45.0"

## Question 11
Q11_req = "SELECT MAX(LIF_REMISE_MONTANT), MAX(LIF_REMISE_POURCENT) FROM T_LIGNE
_FACTURE;"
Q11_res = "79   45"

## Question 12
Q12_req = "SELECT FAC_ID AS fac_id1 FROM T_LIGNE_FACTURE WHERE LIF_REMISE_POURCE
NT != "NULL" OR LIF_REMISE_MONTANT IS NOT NULL"


## Question 13
Q13_req = "SELECT DISTINCT T_FACTURE.CLI_ID FROM T_LIGNE_FACTURE, T_FACTURE WHER
E (LIF_REMISE_POURCENT IS NOT NULL OR LIF_REMISE_MONTANT IS NOT NULL) AND T_LIGN
E_FACTURE.FAC_ID= T_FACTURE.FAC_ID;"

## Question 14
Q14_req = "SELECT CLI_ID FROM T_CLIENT EXCEPT SELECT CLI_ID FROM T_LIGNE_FACTURE
, T_CLIENT WHERE (LIF_REMISE_POURCENT != "NULL" OR LIF_REMISE_MONTANT != "NULL")
 AND T_LIGNE_FACTURE.LIF_ID= T_CLIENT.CLI_ID"
```

```
## Question 15
Q15_req = ""
Q15_res ="nom,prenom,montant"
```

```
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_grea
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

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

=================================== FAILURES ===================================
_____________________________________ test_Q1_req _____________________________________

    def test_Q1_req ():
>       assert requete(sol_Q1_req) == requete(Q1_req)
E       AssertionError: assert [('DUPONT', '...', 'M.'), ...] == [('M.', 'DUPO..
. 'Paul'), ...]
E         At index 0 diff: ('DUPONT', 'Alain', 'M.') != ('M.', 'DUPONT', 'Alain'
)
E         Use -v to get the full diff

test_TP.py:98: AssertionError
_____________________________________ test_Q2_res _____________________________________

    def test_Q2_res ():
>       assert sol_Q2_res.upper() ==  Q2_res.upper()
E       AssertionError: assert '93' == '9'
E         - 93
E         + 9

test_TP.py:101: AssertionError
_____________________________________ test_Q4_req _____________________________________

    def test_Q4_req ():
>       assert requete(sol_Q4_req) == requete(Q4_req)
E       AssertionError: assert [('DUHAMEL', ... 'Mme.'), ...] == [('Melle.', '..
.onique'), ...]
E         At index 0 diff: ('DUHAMEL', 'Evelyne', 'Melle.') != ('Melle.', 'DUHAM
EL', 'Evelyne')
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', '..
.-52-50'), ...]
E         At index 2 diff: ('DUBOIS', '02-41-58-89-52') != ('DUPONT', '01-44-28-
52-50')
E         Right contains 49 more items, first extra item: ('GAL', '04-90-78-10-6
8')
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', 'Martin')
E         Right contains one more item: ('MARTIN', 'Jean-Pierre')
E         Use -v to get the full diff
```

```
test_TP.py:125: AssertionError
_____________________________________ test_Q10_res _____________________________________

    def test_Q10_res ():
>       assert sol_Q10_res.upper() ==  Q10_res.upper()
E       AssertionError: assert '(52.0, 86.0)' == 'REMIS 52, MONTANT 86'
E         - (52.0, 86.0)
E         + REMIS 52, MONTANT 86

test_TP.py:131: AssertionError
_____________________________________ test_Q11_res _____________________________________

    def test_Q11_res ():
>       assert sol_Q11_res.upper() ==  Q11_res.upper()
E       AssertionError: assert '(52.0, 86)' == 'REMIS 52, MONTANT 86'
E         - (52.0, 86)
E         + REMIS 52, MONTANT 86

test_TP.py:137: 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 894 more items, first extra item: (712,)
E         Use -v to get the full diff

test_TP.py:143: AssertionError
_____________________________________ test_Q15_res _____________________________________

    def test_Q15_res ():
>       assert sol_Q15_res.upper() ==  Q15_res.upper()
E       assert "('DUQUESNAY'...CQUES', 1032)" == 'GARREAU,PAUL,MONTANT'
E         - ('DUQUESNAY', 'JACQUES', 1032)
E         + GARREAU,PAUL,MONTANT

test_TP.py:152: AssertionError
_____________________________________ test_Q15_req _____________________________________

    def test_Q15_req ():
>       assert requete(sol_Q15_req) == requete(Q15_req)
E       AssertionError: assert [('DUQUESNAY'...cques', 1032)] == []
E         Left contains one more item: ('DUQUESNAY', 'Jacques', 1032)
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)" == 'GARREAU,PAUL,MONTANT'
E         - ('GARREAU', 'PAUL', 22)
E         + GARREAU,PAUL,MONTANT

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
======================== 12 failed, 10 passed in 0.81s =========================

MODIFICATIONS EFFECTUEES SUR LE FICHIER RENDU
```

```
==========================================

--- prog.py.orig        2020-06-22 08:23:57.000000000 +0200
+++ prog.py     2020-06-24 14:56:43.000000000 +0200
@@ -8,28 +8,25 @@

 ## Question 2
 Q2_req = "SELECT COUNT(*) FROM T_CLIENT"
-Q2_res = "9""
+Q2_res = "9"

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

 ## Question 4
-Q4_req = "SELECT TIT_CODE, CLI_NOM,CLI_PRENOM FROM T_CLIENT WHERE
-TIT_CODE='Mme.' OR TIT_CODE='Melle.'"
+Q4_req = "SELECT TIT_CODE, CLI_NOM,CLI_PRENOM FROM T_CLIENT WHERE TIT_CODE='Mme
.' OR TIT_CODE='Melle.'"


 ## Question 5
-Q5_req = "SELECT COUNT(*) FROM T_CLIENT WHERE
-TIT_CODE='Mme.' OR TIT_CODE='Melle.'"
+Q5_req = "SELECT COUNT(*) FROM T_CLIENT WHERE TIT_CODE='Mme.' OR TIT_CODE='Mell
e.'"
 Q5_res = "17"

 ## Question 6
-Q6_req = "SELECT CLI_NOM, CLI_PRENOM FROM T_CLIENT WHERE TIT_CODE="Mme." OR TIT
_CODE="Melle." ORDER BY CLI_NOM,CLI_PRENOM ASC"
+Q6_req = "SELECT CLI_NOM, CLI_PRENOM FROM T_CLIENT WHERE TIT_CODE='Mme.' OR TIT
_CODE='Melle.' ORDER BY CLI_NOM,CLI_PRENOM ASC"


 ## Question 7
-Q7_req = "SELECT CLI_NOM, TEL_NUMERO
-FROM T_CLIENT JOIN T_TELEPHONE ON T_CLIENT.CLI_ID=T_TELEPHONE.CLI_ID"
+Q7_req = "SELECT CLI_NOM, TEL_NUMERO FROM T_CLIENT JOIN T_TELEPHONE ON T_CLIENT
.CLI_ID=T_TELEPHONE.CLI_ID"

 ## Question 8
 Q8_req = "SELECT CLI_NOM,CLI_PRENOM FROM T_CLIENT JOIN(SELECT CLI_NOM as nom,CO
UNT(CLI_NOM) as nbnom FROM T_CLIENT GROUP BY CLI_NOM)ON T_CLIENT.CLI_NOM=nom  WH
ERE nbnom>1"
@@ -39,13 +36,11 @@
 Q9_res = "2"

 ## Question 10
-Q10_req = "SELECT AVG (LIF_REMISE_POURCENT),AVG(LIF_REMISE_MONTANT)
-FROM T_LIGNE_FACTURE"
+Q10_req = "SELECT AVG (LIF_REMISE_POURCENT),AVG(LIF_REMISE_MONTANT)  FROM T_LIG
NE_FACTURE"
 Q10_res = "remis 52, montant 86"

 ## Question 11
-Q11_req = "SELECT MAX (LIF_REMISE_POURCENT),MAX(LIF_REMISE_MONTANT)
-FROM T_LIGNE_FACTURE"
+Q11_req = "SELECT MAX (LIF_REMISE_POURCENT),MAX(LIF_REMISE_MONTANT)  FROM T_LIG
NE_FACTURE"
 Q11_res = "remis 52, montant 86"

 ## Question 12
@@ -53,8 +48,7 @@


 ## Question 13
-Q13_req = "SELECT DISTINCT CLI_ID FROM T_FACTURE JOIN (SELECT FAC_ID as fac_id1
```

```
 FROM T_LIGNE_FACTURE WHERE LIF_REMISE_MONTANT NOT NULL OR LIF_REMISE_POURCENT N
OT NULL)
-ON T_FACTURE.FAC_ID=fac_id1"
+Q13_req = "SELECT DISTINCT CLI_ID FROM T_FACTURE JOIN (SELECT FAC_ID as fac_id1
 FROM T_LIGNE_FACTURE WHERE LIF_REMISE_MONTANT NOT NULL OR LIF_REMISE_POURCENT N
OT NULL) ON T_FACTURE.FAC_ID=fac_id1"

 ## Question 14
 Q14_req = "SELECT CLI_ID FROM T_CLIENT EXCEPT SELECT DISTINCT CLI_ID FROM T_FAC
TURE JOIN (SELECT FAC_ID as fac_id1 FROM T_LIGNE_FACTURE WHERE LIF_REMISE_MONTAN
T NOT NULL OR LIF_REMISE_POURCENT NOT NULL) ON T_FACTURE.FAC_ID=fac_id1"
```

```
NOM = "GREA"
Prenom = "Mattéo"
Classe = "MPSI2"
alpha="37"

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

## Question 2
Q2_req = "SELECT COUNT(*) FROM T_CLIENT"
Q2_res = "9""

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

## Question 4
Q4_req = "SELECT TIT_CODE, CLI_NOM,CLI_PRENOM FROM T_CLIENT WHERE
TIT_CODE=’Mme.’ OR TIT_CODE=’Melle.’"


## Question 5
Q5_req = "SELECT COUNT(*) FROM T_CLIENT WHERE
TIT_CODE=’Mme.’ OR TIT_CODE=’Melle.’"
Q5_res = "17"

## Question 6
Q6_req = "SELECT CLI_NOM, CLI_PRENOM FROM T_CLIENT WHERE TIT_CODE="Mme." OR TIT_
CODE="Melle." ORDER BY CLI_NOM,CLI_PRENOM ASC"


## Question 7
Q7_req = "SELECT CLI_NOM, TEL_NUMERO
FROM T_CLIENT JOIN T_TELEPHONE ON T_CLIENT.CLI_ID=T_TELEPHONE.CLI_ID"

## Question 8
Q8_req = "SELECT CLI_NOM,CLI_PRENOM FROM T_CLIENT JOIN(SELECT CLI_NOM as nom,COU
NT(CLI_NOM) as nbnom FROM T_CLIENT GROUP BY CLI_NOM)ON T_CLIENT.CLI_NOM=nom  WHE
RE nbnom>1"

## Question 9
Q9_req = "SELECT CLI_NOM,nbnom FROM (SELECT CLI_NOM,COUNT(CLI_NOM) as nbnom FROM
 T_CLIENT GROUP BY CLI_NOM) WHERE nbnom>1"
Q9_res = "2"

## Question 10
Q10_req = "SELECT AVG (LIF_REMISE_POURCENT),AVG(LIF_REMISE_MONTANT)
FROM T_LIGNE_FACTURE"
Q10_res = "remis 52, montant 86"

## Question 11
Q11_req = "SELECT MAX (LIF_REMISE_POURCENT),MAX(LIF_REMISE_MONTANT)
FROM T_LIGNE_FACTURE"
Q11_res = "remis 52, montant 86"

## Question 12
Q12_req = "SELECT FAC_ID as fac_id1 FROM T_LIGNE_FACTURE WHERE LIF_REMISE_MONTAN
T NOT NULL OR LIF_REMISE_POURCENT NOT NULL"


## Question 13
Q13_req = "SELECT DISTINCT CLI_ID FROM T_FACTURE JOIN (SELECT FAC_ID as fac_id1
FROM T_LIGNE_FACTURE WHERE LIF_REMISE_MONTANT NOT NULL OR LIF_REMISE_POURCENT NO
T NULL)
ON T_FACTURE.FAC_ID=fac_id1"

## Question 14
Q14_req = "SELECT CLI_ID FROM T_CLIENT EXCEPT SELECT DISTINCT CLI_ID FROM T_FACT
URE JOIN (SELECT FAC_ID as fac_id1 FROM T_LIGNE_FACTURE WHERE LIF_REMISE_MONTANT
```

```
 NOT NULL OR LIF_REMISE_POURCENT NOT NULL) ON T_FACTURE.FAC_ID=fac_id1"


## Question 15
Q15_req = ""
Q15_res ="GARREAU,Paul,montant"
```

```
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...FFFFFFFFF.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"
```

```
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_hamadi
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

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

=================================== FAILURES ===================================
_____________________________________ test_Q7_req _____________________________________

    def test_Q7_req ():
>       assert requete(sol_Q7_req) == requete(Q7_req)
E       AssertionError: assert [('DUPONT', '...-52-56'), ...] == [('DUPONT', '..
.-43-21'), ...]
E         At index 2 diff: ('DUBOIS', '02-41-58-89-52') != ('DUPONT', '01-44-28-
52-50')
E         Right contains 13775 more items, first extra item: ('DUPONT', '04-90-7
8-10-68')
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', 'Marc')
E         Right contains 2 more items, first extra item: ('MARTIN', 'Martin')
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', 3)] == [('AIACH', 1)...NEE', 1), ...]
E         At index 0 diff: ('MARTIN', 3) != ('AIACH', 1)
E         Right contains 86 more items, first extra item: ('AUZENAT', 1)
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 '(88.0, 122.0)' == '88.0 ET 122.0'
E         - (88.0, 122.0)
E         ? -    ^      -
E         + 88.0 ET 122.0
E         ?     ^^^

test_TP.py:131: AssertionError
_____________________________________ test_Q11_res _____________________________________

    def test_Q11_res ():
>       assert sol_Q11_res.upper() ==  Q11_res.upper()
E       AssertionError: assert '(88.0, 122)' == '88 ET 122'
E         - (88.0, 122)
E         + 88 ET 122

test_TP.py:137: 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,), (2,), ...,), (7,), ...] == [(1,), (1,), ...,), (1,), ...]
E         At index 1 diff: (2,) != (1,)
E         Right contains 1075 more items, first extra item: (9,)
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', 1464)" == 'NOM,PRENOM,MONTANT'
E         - ('MEDARD', 'JACQUES', 1464)
E         + NOM,PRENOM,MONTANT

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', 1464)] == []
E         Left contains one more item: ('MEDARD', 'Jacques', 1464)
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)" == 'NOM,PRENOM,MONTANT'
E         - ('GARREAU', 'PAUL', 22)
E         + NOM,PRENOM,MONTANT

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
======================== 11 failed, 11 passed in 0.77s =========================

MODIFICATIONS EFFECTUEES SUR LE FICHIER RENDU
=============================================

--- prog.py.orig        2020-06-22 08:24:01.000000000 +0200
+++ prog.py     2020-06-24 14:56:57.000000000 +0200
@@ -51,8 +51,7 @@
 Q13_req = "select CLI_ID from T_FACTURE join T_LIGNE_FACTURE on T_FACTURE.FAC_I
D=T_LIGNE_FACTURE.FAC_ID where LIF_REMISE_MONTANT !=0 or LIF_REMISE_POURCENT!=0;
"
```

```
 ## Question 14
-Q14_req = "select CLI_ID from T_FACTURE join T_LIGNE_FACTURE on T_FACTURE.FAC_I
D=T_LIGNE_FACTURE.FAC_ID
- where LIF_REMISE_MONTANT < 122 and LIF_REMISE_POURCENT <88;"
+Q14_req = "select CLI_ID from T_FACTURE join T_LIGNE_FACTURE on T_FACTURE.FAC_I
D=T_LIGNE_FACTURE.FAC_ID where LIF_REMISE_MONTANT < 122 and LIF_REMISE_POURCENT
<88;"


 ## Question 15
```

```
NOM = "HAMADI"
Prenom = "Halima"
Classe = "MPSI2"
alpha="73"

## Question 1
Q1_req = "select CLI_NOM,CLI_PRENOM, TIT_CODE from T_CLIENT;"

## Question 2
Q2_req = "select count (CLI_ID) from T_CLIENT;"
Q2_res = "89"

## 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.'
 or TIT_CODE='Melle.';"


## Question 5
Q5_req = "select count(*) from T_CLIENT where TIT_CODE='Mme.' or TIT_CODE='Melle
.';"
Q5_res = "15"

## Question 6
Q6_req = "select DISTINCT CLI_NOM as Noms , CLI_PRENOM as Prénoms from T_CLIENT
where TIT_CODE='Mme.' or TIT_CODE='Melle.' order by Noms ASC, Prénoms ASC;"


## Question 7
Q7_req = "select T_CLIENT.CLI_NOM, T_TELEPHONE.TEL_NUMERO from T_CLIENT, T_TELEP
HONE;"

## Question 8
Q8_req = "select T_CLIENT.CLI_NOM, T_CLIENT.CLI_PRENOM from T_CLIENT where t_cli
ent.CLI_NOM=(select T_CLIENT.CLI_NOM from T_CLIENT GROUP by T_CLIENT.CLI_NOM HAV
ING count(CLI_NOM)>1);"

## Question 9
Q9_req = "select CLI_NOM, cn from ( select CLI_NOM, count(CLI_NOM) as cn from T_
CLIENT GROUP by CLI_NOM );"
Q9_res = "MARTIN =3, les autres=1"

## Question 10
Q10_req = "select avg( LIF_REMISE_POURCENT), avg( LIF_REMISE_MONTANT) from T_LIG
NE_FACTURE;"
Q10_res = "88.0 et 122.0"

## Question 11
Q11_req = "select max( LIF_REMISE_POURCENT), max( LIF_REMISE_MONTANT) from T_LIG
NE_FACTURE;"
Q11_res = "88 et 122"

## 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 on T_FACTURE.FAC_ID
=T_LIGNE_FACTURE.FAC_ID where LIF_REMISE_MONTANT !=0 or LIF_REMISE_POURCENT!=0;"

## Question 14
Q14_req = "select CLI_ID from T_FACTURE join T_LIGNE_FACTURE on T_FACTURE.FAC_ID
=T_LIGNE_FACTURE.FAC_ID
 where LIF_REMISE_MONTANT < 122 and LIF_REMISE_POURCENT <88;"
```

```
## Question 15
Q15_req = ""
Q15_res ="nom,prenom,montant"
```

```
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_hatoum
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

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

=================================== FAILURES ===================================
_____________________________________ test_Q1_req _____________________________________

    def test_Q1_req ():
>       assert requete(sol_Q1_req) == requete(Q1_req)
E       AssertionError: assert [('DUPONT', '...', 'M.'), ...] == [('DUPONT', '..
.nsieur'), ...]
E         At index 0 diff: ('DUPONT', 'Alain', 'M.') != ('DUPONT', 'Alain', 'Mon
sieur')
E         Use -v to get the full diff

test_TP.py:98: AssertionError
_____________________________________ test_Q4_req _____________________________________

    def test_Q4_req ():
>       assert requete(sol_Q4_req) == requete(Q4_req)
E       AssertionError: assert [('DUHAMEL', ... 'Mme.'), ...] == [('DUHAMEL', ..
.Madame'), ...]
E         At index 0 diff: ('DUHAMEL', 'Evelyne', 'Melle.') != ('DUHAMEL', 'Evel
yne', 'Mademoiselle')
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', '..
.-52-50'), ...]
E         At index 2 diff: ('DUBOIS', '02-41-58-89-52') != ('DUPONT', '01-44-28-
52-50')
E         Right contains 48 more items, first extra item: ('AIACH', '04-91-52-51
-52')
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 [('BENATTAR',), ('MARTIN',)] == [('BENATTAR',...J
ean-Pierre')]
E         At index 0 diff: ('BENATTAR',) != ('BENATTAR', 'Bernard')
E         Use -v to get the full diff

test_TP.py:125: AssertionError
_____________________________________ test_Q10_res _____________________________________

    def test_Q10_res ():
>       assert sol_Q10_res.upper() ==  Q10_res.upper()
E       AssertionError: assert '(25.0, 59.0)' == '25 59'
E         - (25.0, 59.0)
E         + 25 59
```

```
test_TP.py:131: AssertionError
_____________________________________ test_Q11_res _____________________________________

    def test_Q11_res ():
>       assert sol_Q11_res.upper() ==  Q11_res.upper()
E       AssertionError: assert '(25.0, 59)' == '25 59'
E         - (25.0, 59)
E         + 25 59

test_TP.py:137: AssertionError
_____________________________________ test_Q12_req _____________________________________

    def test_Q12_req ():
>       assert requete(sol_Q12_req) == requete(Q12_req)
E       assert [(1,), (2,), ...), (26,), ...] == [(3,), (4,), ...), (73,), ...]
E         At index 0 diff: (1,) != (3,)
E         Left contains 183 more items, first extra item: (1120,)
E         Use -v to get the full diff

test_TP.py:143: AssertionError
_____________________________________ test_Q15_res _____________________________________

    def test_Q15_res ():
>       assert sol_Q15_res.upper() ==  Q15_res.upper()
E       assert "('SILLET', 'JACQUES', 649)" == 'NOM,PRENOM,MONTANT'
E         - ('SILLET', 'JACQUES', 649)
E         + NOM,PRENOM,MONTANT

test_TP.py:152: AssertionError
_____________________________________ test_Q15_req _____________________________________

    def test_Q15_req ():
>       assert requete(sol_Q15_req) == requete(Q15_req)
E       AssertionError: assert [('SILLET', 'Jacques', 649)] == []
E         Left contains one more item: ('SILLET', 'Jacques', 649)
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 "('THOMASSE',...-CLAUDE', 20)" == 'NOM,PRENOM,MONTANT'
E         - ('THOMASSE', 'JEAN-CLAUDE', 20)
E         + NOM,PRENOM,MONTANT

test_TP.py:158: AssertionError
_____________________________________ test_Q15_req2 _____________________________________

    def test_Q15_req2 ():
>       assert requete(sol_Q15_req2) == requete(Q15_req)
E       AssertionError: assert [('THOMASSE',...-Claude', 20)] == []
E         Left contains one more item: ('THOMASSE', 'Jean-Claude', 20)
E         Use -v to get the full diff

test_TP.py:161: AssertionError
======================== 11 failed, 11 passed in 0.85s =========================
```

```
NOM = "HATOUM"
Prenom = "RALPH"
Classe = "MPSI2"
alpha="10"

## Question 1
Q1_req = "SELECT CLI_NOM, CLI_PRENOM, TIT_LIBELLE from T_CLIENT, T_titre where t
_client.TIT_CODE = t_titre.TIT_CODE "

## Question 2
Q2_req = "SELECT count (*) from t_client"
Q2_res = "96"

## Question 3
Q3_req = "SELECT CLI_NOM, CLI_PRENOM from T_CLIENT, T_titre where t_client.TIT_C
ODE = t_titre.TIT_CODE and t_titre.TIT_LIBELLE='Madame'"

## Question 4
Q4_req = "SELECT CLI_NOM, CLI_PRENOM, TIT_LIBELLE  from T_CLIENT, T_titre where
t_client.TIT_CODE = t_titre.TIT_CODE and ( t_titre.TIT_LIBELLE='Madame' or t_tit
re.TIT_LIBELLE='Mademoiselle')"


## Question 5
Q5_req = "SELECT count(*) from ( SELECT CLI_NOM, CLI_PRENOM, TIT_LIBELLE  from T
_CLIENT, T_titre where t_client.TIT_CODE = t_titre.TIT_CODE and ( t_titre.TIT_LI
BELLE='Madame' or t_titre.TIT_LIBELLE='Mademoiselle') )"
Q5_res = "17"

## Question 6
Q6_req = "SELECT CLI_NOM as 'Noms', CLI_PRENOM as 'Prénoms' from T_CLIENT, T_tit
re where t_client.TIT_CODE = t_titre.TIT_CODE and ( t_titre.TIT_LIBELLE='Madame'
 or t_titre.TIT_LIBELLE='Mademoiselle') order by CLI_NOM asc "


## Question 7
Q7_req = "SELECT CLI_NOM, TEL_NUMERO from T_CLIENT, T_TELEPHONE where T_TELEPHON
E.CLI_ID = T_CLIENT.CLI_ID"

## Question 8
Q8_req = "SELECT CLI_NOM, CLI_PRENOM  from (SELECT CLI_NOM, CLI_PRENOM, count(*)
 as nb from T_CLIENT group by CLI_NOM) where nb > 1 ;"

## Question 9
Q9_req = "SELECT CLI_NOM, nb  from (SELECT CLI_NOM, CLI_PRENOM, count(*) as nb f
rom T_CLIENT group by CLI_NOM) where nb > 1 ;"
Q9_res = "BENATTAR 2, MARTIN 3"

## Question 10
Q10_req = "SELECT sum(LIF_remise_pourcent)/count(lif_remise_pourcent), sum(lif_r
emise_montant)/count(LIF_REMISE_MONTANT) from T_LIGNE_FACTURE "
Q10_res = "25 59"

## Question 11
Q11_req = "SELECT max(LIF_REMISE_POURCENT), max(LIF_REMISE_MONTANT) from T_LIGNE
_FACTURE "
Q11_res = "25 59"

## Question 12
Q12_req = "select DISTINCT FAC_ID as fac_id1 from T_LIGNE_FACTURE where (LIF_REM
ISE_MONTANT is not NULL or LIF_REMISE_MONTANT is not NULL)"


## Question 13
Q13_req = "select distinct CLI_ID from T_FACTURE join (select DISTINCT FAC_ID as
 fac_id1 from T_LIGNE_FACTURE where (LIF_REMISE_MONTANT is not NULL or LIF_REMIS
E_MONTANT is not NULL)) on T_FACTURE.FAC_ID = fac_id1"
```

```
## Question 14
Q14_req = ""


## Question 15
Q15_req = ""
Q15_res ="nom,prenom,montant"
```

```
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_hirigaray
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

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

=================================== FAILURES ===================================
_____________________________________ test_Q1_req _____________________________________

    def test_Q1_req ():
>       assert requete(sol_Q1_req) == requete(Q1_req)
E       AssertionError: assert [('DUPONT', '...', 'M.'), ...] == [('M.', 'DUPO..
.'Alain'), ...]
E         At index 0 diff: ('DUPONT', 'Alain', 'M.') != ('M.', 'DUPONT', 'Alain'
)
E         Use -v to get the full diff

test_TP.py:98: AssertionError
_____________________________________ test_Q5_req _____________________________________

    def test_Q5_req ():
>       assert requete(sol_Q5_req) == requete(Q5_req)
E       AssertionError: assert [(15,)] == [('DAUMIER', ... 'Mme.'), ...]
E         At index 0 diff: (15,) != ('DAUMIER', 'Amélie', 'Melle.')
E         Right contains 14 more items, first extra item: ('BOYER', 'Martine', '
Mme.')
E         Use -v to get the full diff

test_TP.py:116: AssertionError
_____________________________________ test_Q7_req _____________________________________

    def test_Q7_req ():
>       assert requete(sol_Q7_req) == requete(Q7_req)
E       AssertionError: assert [('DUPONT', '...-52-56'), ...] == [('DUPONT', '..
.-52-50'), ...]
E         At index 2 diff: ('DUBOIS', '02-41-58-89-52') != ('DUPONT', '01-44-28-
52-50')
E         Right contains 46 more items, first extra item: ('AIACH', '04-91-52-51
-52')
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',)] == []
E         Left contains one more item: ('MARTIN',)
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)] == []
E         Left contains one more item: ('MARTIN', 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 '(58.0, 92.0)' == '58.0, 92.0'
E         - (58.0, 92.0)
E         ? -          -
E         + 58.0, 92.0

test_TP.py:131: AssertionError
_____________________________________ test_Q11_res _____________________________________

    def test_Q11_res ():
>       assert sol_Q11_res.upper() ==  Q11_res.upper()
E       AssertionError: assert '(58.0, 92)' == '58, 92'
E         - (58.0, 92)
E         ? -  --    -
E         + 58, 92

test_TP.py:137: 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 897 more items, first extra item: (690,)
E         Use -v to get the full diff

test_TP.py:143: AssertionError
_____________________________________ test_Q15_res _____________________________________

    def test_Q15_res ():
>       assert sol_Q15_res.upper() ==  Q15_res.upper()
E       assert "('MEDARD', 'JACQUES', 1104)" == 'NOM,PRENOM,480'
E         - ('MEDARD', 'JACQUES', 1104)
E         + NOM,PRENOM,480

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', 1104)] == []
E         Left contains one more item: ('MEDARD', 'Jacques', 1104)
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 "('LETERRIER', 'MONIQUE', 21)" == 'NOM,PRENOM,480'
E         - ('LETERRIER', 'MONIQUE', 21)
E         + NOM,PRENOM,480

test_TP.py:158: AssertionError
_____________________________________ test_Q15_req2 _____________________________________

    def test_Q15_req2 ():
>       assert requete(sol_Q15_req2) == requete(Q15_req)
E       AssertionError: assert [('LETERRIER', 'Monique', 21)] == []
E         Left contains one more item: ('LETERRIER', 'Monique', 21)
E         Use -v to get the full diff

test_TP.py:161: AssertionError
======================== 12 failed, 10 passed in 0.73s =========================
```

```
NOM = "HIRIGARAY"
Prenom = "Mathieu"
Classe = "MPSI2"
alpha="43"

## Question 1
Q1_req = "select TIT_CODE, CLI_NOM, CLI_PRENOM from T_CLIENT;"

## Question 2
Q2_req = "select count(*) from T_CLIENT;"
Q2_res = "92"

## 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
.' or TIT_CODE='Melle.';"


## Question 5
Q5_req = "select CLI_NOM, CLI_PRENOM, TIT_CODE from T_CLIENT where TIT_CODE='Mme
.' or TIT_CODE='Melle.';"
Q5_res = "15"

## Question 6
Q6_req = "select CLI_NOM as Noms, CLI_PRENOM as Prénoms from T_CLIENT where TIT_
CODE='Mme.' or TIT_CODE='Melle.' order by Noms, Prénoms asc;"


## Question 7
Q7_req = "select CLI_NOM as Noms, TEL_NUMERO from  T_CLIENT join T_TELEPHONE on
T_CLIENT.CLI_ID=T_TELEPHONE.CLI_ID;"

## Question 8
Q8_req = "select CLI_NOM from T_CLIENT except select distinct CLI_NOM from T_CLI
ENT;"

## Question 9
Q9_req = ""
Q9_res = "2"

## Question 10
Q10_req = "SELECT AVG(LIF_REMISE_POURCENT), AVG(LIF_REMISE_MONTANT) FROM T_LIGNE
_FACTURE;"
Q10_res = "58.0, 92.0"

## Question 11
Q11_req = "SELECT max(LIF_REMISE_POURCENT), max(LIF_REMISE_MONTANT) FROM T_LIGNE
_FACTURE;"
Q11_res = "58, 92"

## Question 12
Q12_req = "select FAC_ID as fac_id1 from T_LIGNE_FACTURE where LIF_REMISE_POURCE
NT!='NULL' or LIF_REMISE_MONTANT!='NULL';"


## Question 13
Q13_req = "select distinct CLI_ID from T_FACTURE join (select FAC_ID as fac_id1
from T_LIGNE_FACTURE where LIF_REMISE_POURCENT!='NULL' or LIF_REMISE_MONTANT!='N
ULL') on FAC_ID=fac_id1;"

## Question 14
Q14_req = "select distinct CLI_ID from T_FACTURE join (select FAC_ID as fac_id1
from T_LIGNE_FACTURE where LIF_REMISE_POURCENT='NULL' and LIF_REMISE_MONTANT='NU
LL') on FAC_ID=fac_id1;"
```

```
## Question 15
Q15_req = "select CLI_NOM, CLI_PRENOM, CLI_ID from T_CLIENT where (select LIF_MO
NTANT from T_LIGNE_FACTURE join T_FACTURE on T_LIGNE_FACTURE.FAC_ID= T_FACTURE.F
AC_ID)=(select max(tt) as aa from (select LIF_MONTANT as tt from T_LIGNE_FACTURE
));"
Q15_res ="nom,prenom,480"
```

```
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_khatib
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

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

=================================== FAILURES ===================================
_____________________________________ test_Q1_req _____________________________________

    def test_Q1_req ():
>       assert requete(sol_Q1_req) == requete(Q1_req)
E       AssertionError: assert [('DUPONT', '...', 'M.'), ...] == [('M.', 'DUPO..
.'Alain'), ...]
E         At index 0 diff: ('DUPONT', 'Alain', 'M.') != ('M.', 'DUPONT', 'Alain'
)
E         Use -v to get the full diff

test_TP.py:98: AssertionError
_____________________________________ test_Q4_req _____________________________________

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

test_TP.py:110: AssertionError
_____________________________________ test_Q6_req _____________________________________

    def test_Q6_req ():
>       assert requete(sol_Q6_req) == requete(Q6_req)
E       AssertionError: assert [('BOYER', 'M...velyne'), ...] == [('DAUMIER', ..
.velyne'), ...]
E         At index 0 diff: ('BOYER', 'Martine') != ('DAUMIER', 'Amélie')
E         Use -v to get the full diff

test_TP.py:119: AssertionError
_____________________________________ test_Q7_req _____________________________________

    def test_Q7_req ():
>       assert requete(sol_Q7_req) == requete(Q7_req)
E       AssertionError: assert [('DUPONT', '...-92-21'), ...] == []
E         Left contains 121 more items, first extra item: ('DUPONT', '01-45-42-5
6-63')
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',)] == []
E         Left contains one more item: ('MARTIN',)
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', 3)] == []
E         Left contains one more item: ('MARTIN', 3)
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 '(22.0, 56.0)' == ''
E         - (22.0, 56.0)

test_TP.py:131: AssertionError
_____________________________________ test_Q10_req _____________________________________

    def test_Q10_req ():
>       assert requete(sol_Q10_req) == requete(Q10_req)
E       assert [(22.0, 56.0)] == []
E         Left contains one more item: (22.0, 56.0)
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 '(22.0, 56)' == ''
E         - (22.0, 56)

test_TP.py:137: AssertionError
_____________________________________ test_Q11_req _____________________________________

    def test_Q11_req ():
>       assert requete(sol_Q11_req) == requete(Q11_req)
E       assert [(22.0, 56)] == []
E         Left contains one more item: (22.0, 56)
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,), ...] == [(3,), (3,), ...), (27,), ...]
E         At index 0 diff: (1,) != (3,)
E         Right contains 216 more items, first extra item: (1523,)
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,), (2,), ...,), (6,), ...] == [(1,), (1,), ...,), (2,), ...]
E         At index 1 diff: (2,) != (1,)
E         Right contains 452 more items, first extra item: (20,)
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', 672)" == 'MEDARD,JACQUES,504'
E         - ('MEDARD', 'JACQUES', 672)
E         + MEDARD,JACQUES,504
```

```
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', 672)] == [(504,)]
E         At index 0 diff: ('MEDARD', 'Jacques', 672) != (504,)
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 "('THOMASSE',...-CLAUDE', 20)" == 'MEDARD,JACQUES,504'
E         - ('THOMASSE', 'JEAN-CLAUDE', 20)
E         + MEDARD,JACQUES,504

test_TP.py:158: AssertionError
_____________________________________ test_Q15_req2 _____________________________________

    def test_Q15_req2 ():
>       assert requete(sol_Q15_req2) == requete(Q15_req)
E       AssertionError: assert [('THOMASSE',...-Claude', 20)] == [(504,)]
E         At index 0 diff: ('THOMASSE', 'Jean-Claude', 20) != (504,)
E         Use -v to get the full diff

test_TP.py:161: AssertionError
========================== 16 failed, 6 passed in 0.85s ==========================
```

```
NOM = "KHATIB"
Prenom = "Rabab"
Classe = "MPSI2"
alpha="7"

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

## Question 2
Q2_req = "SELECT COUNT (*) FROM T_CLIENT;"
Q2_res = "98"

## 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 FROM T_CLIENT WHERE (TIT_CODE='Mme.' OR TIT
_CODE='Melle.');"

## Question 5
Q5_req = "SELECT COUNT (*) FROM T_CLIENT WHERE (TIT_CODE='Mme.' OR TIT_CODE='Mel
le.' );"
Q5_res = "17"

## Question 6
Q6_req = "SELECT CLI_NOM AS 'Noms', CLI_PRENOM AS 'Prénoms'  FROM (SELECT CLI_NO
M, CLI_PRENOM FROM T_CLIENT WHERE (TIT_CODE='Mme.' OR TIT_CODE='Melle.' ) ORDER
BY CLI_NOM) ORDER BY CLI_PRENOM;"

## Question 7
Q7_req = ""

## Question 8
Q8_req = ""

## Question 9
Q9_req = ""
Q9_res = ""

## Question 10
Q10_req = ""
Q10_res = ""

## Question 11
Q11_req = ""
Q11_res = ""

## Question 12
Q12_req = "SELECT FAC_ID AS 'fac_id1' FROM T_LIGNE_FACTURE WHERE LIF_REMISE_MONT
ANT<>'NULL';"


## Question 13
Q13_req = "SELECT CLI_ID FROM T_FACTURE JOIN T_LIGNE_FACTURE ON T_FACTURE.FAC_ID
=T_LIGNE_FACTURE.FAC_ID WHERE LIF_REMISE_MONTANT<>'NULL';"

## Question 14
Q14_req = ""


## Question 15
Q15_req = "SELECT MAX(cout) FROM (SELECT FAC_ID, SUM(LIF_REMISE_MONTANT) AS 'cou
t' FROM T_LIGNE_FACTURE GROUP BY FAC_ID);"
Q15_res ="MEDARD,Jacques,504"
```

```
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_luri
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

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

=================================== FAILURES ===================================
_____________________________________ test_Q1_req _____________________________________

    def test_Q1_req ():
>       assert requete(sol_Q1_req) == requete(Q1_req)
E       AssertionError: assert [('DUPONT', '...', 'M.'), ...] == [('M.', 'Alai..
.'FAURE'), ...]
E         At index 0 diff: ('DUPONT', 'Alain', 'M.') != ('M.', 'Alain', 'DUPONT'
)
E         Use -v to get the full diff

test_TP.py:98: AssertionError
_____________________________________ test_Q3_req _____________________________________

    def test_Q3_req ():
>       assert requete(sol_Q3_req) == requete(Q3_req)
E       AssertionError: assert [('BOYER', 'M...ueline'), ...] == [('Martine', ..
.'DAVID'), ...]
E         At index 0 diff: ('BOYER', 'Martine') != ('Martine', 'BOYER')
E         Use -v to get the full diff

test_TP.py:107: AssertionError
_____________________________________ test_Q4_req _____________________________________

    def test_Q4_req ():
>       assert requete(sol_Q4_req) == requete(Q4_req)
E       AssertionError: assert [('DUHAMEL', ... 'Mme.'), ...] == [('Melle.', '..
.HAMBON'), ...]
E         At index 0 diff: ('DUHAMEL', 'Evelyne', 'Melle.') != ('Melle.', 'Améli
e', 'DAUMIER')
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'), ...] == [('AIACH', '0..
.-33-49'), ...]
E         At index 0 diff: ('DUPONT', '01-45-42-56-63') != ('AIACH', '04-91-52-5
1-52')
E         Right contains 48 more items, first extra item: ('MOURGUES', '01-48-78
-30-69')
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 [('BENATTAR',), ('MARTIN',)] == [('M.', 'Marc...,
 'BENATTAR')]
E         At index 0 diff: ('BENATTAR',) != ('M.', 'Marc', 'MARTIN')
E         Right contains 3 more items, first extra item: ('M.', 'Jean-Pierre', '
```

```
MARTIN')
E         Use -v to get the full diff

test_TP.py:125: AssertionError
_____________________________________ test_Q10_res _____________________________________

    def test_Q10_res ():
>       assert sol_Q10_res.upper() ==  Q10_res.upper()
E       AssertionError: assert '(17.0, 51.0)' == '17;51'
E         - (17.0, 51.0)
E         + 17;51

test_TP.py:131: AssertionError
_____________________________________ test_Q11_res _____________________________________

    def test_Q11_res ():
>       assert sol_Q11_res.upper() ==  Q11_res.upper()
E       AssertionError: assert '(17.0, 51)' == '17;51'
E         - (17.0, 51)
E         + 17;51

test_TP.py:137: 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 848 more items, first extra item: (668,)
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,), (2,), ...,), (6,), ...] == [(1,), (1,), ...,), (1,), ...]
E         At index 1 diff: (2,) != (1,)
E         Right contains 1048 more items, first extra item: (9,)
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 "('SILLET', 'JACQUES', 561)" == 'THIRIOT,JACKY,81.6'
E         - ('SILLET', 'JACQUES', 561)
E         + THIRIOT,JACKY,81.6

test_TP.py:152: AssertionError
_____________________________________ test_Q15_req _____________________________________

    def test_Q15_req ():
>       assert requete(sol_Q15_req) == requete(Q15_req)
E       AssertionError: assert [('SILLET', 'Jacques', 561)] == [('THIRIOT', ...0
00000000001)]
E         At index 0 diff: ('SILLET', 'Jacques', 561) != ('THIRIOT', 'Jacky', 81
.60000000000001)
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 "('THOMASSE',...-CLAUDE', 20)" == 'THIRIOT,JACKY,81.6'
E         - ('THOMASSE', 'JEAN-CLAUDE', 20)
```

```
E         + THIRIOT,JACKY,81.6

test_TP.py:158: AssertionError
_____________________________ test_Q15_req2 ______________________________

    def test_Q15_req2 ():
>       assert requete(sol_Q15_req2) == requete(Q15_req)
E       AssertionError: assert [('THOMASSE',...-Claude', 20)] == [('THIRIOT', ..
.000000000001)]
E         At index 0 diff: ('THOMASSE', 'Jean-Claude', 20) != ('THIRIOT', 'Jacky
', 81.60000000000001)
E         Use -v to get the full diff

test_TP.py:161: AssertionError
======================== 13 failed, 9 passed in 0.75s ========================

MODIFICATIONS EFFECTUEES SUR LE FICHIER RENDU
=============================================

--- prog.py.orig        2020-06-22 08:24:08.000000000 +0200
+++ prog.py     2020-06-24 14:57:11.000000000 +0200
@@ -4,103 +4,55 @@
 alpha="2"

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

 ## Question 2
-Q2_req = "SELECT COUNT()
-FROM T_CLIENT
-;;"
+Q2_req = "SELECT COUNT() FROM T_CLIENT"
 Q2_res = "97"

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

 ## Question 4
-Q4_req = "SELECT TIT_CODE, CLI_PRENOM, CLI_NOM
-FROM T_CLIENT
-WHERE TIT_CODE="Mme."
-
-UNION
-
-SELECT TIT_CODE, CLI_PRENOM, CLI_NOM
-FROM T_CLIENT
-WHERE TIT_CODE="Melle."
-;;"
+Q4_req = "SELECT TIT_CODE, CLI_PRENOM, CLI_NOM FROM T_CLIENT WHERE TIT_CODE='Mm
e.' UNION SELECT TIT_CODE, CLI_PRENOM, CLI_NOM FROM T_CLIENT WHERE TIT_CODE='Mel
le.'"


 ## Question 5
-Q5_req = "SELECT COUNT()
-FROM T_CLIENT
-WHERE TIT_CODE="Mme." OR TIT_CODE="Melle."
-;;"
+Q5_req = "SELECT COUNT() FROM T_CLIENT WHERE TIT_CODE='Mme.' OR TIT_CODE='Melle
.'"
 Q5_res = "17"
```

```
 ## Question 6
-Q6_req = "SELECT CLI_NOM AS "Nom", CLI_PRENOM AS "Prenom"
-FROM T_CLIENT
-WHERE TIT_CODE="Melle." OR TIT_CODE="Mme."
-ORDER BY CLI_NOM"
-
+Q6_req = "SELECT CLI_NOM AS 'Nom', CLI_PRENOM AS 'Prenom' FROM T_CLIENT WHERE T
IT_CODE='Melle.' OR TIT_CODE='Mme.' ORDER BY CLI_NOM"

 ## Question 7
-Q7_req = "SELECT CLI_NOM AS "Nom", TEL_NUMERO AS "Numéro de téléphone"
-FROM T_CLIENT, T_TELEPHONE
-WHERE T_CLIENT.CLI_ID=T_TELEPHONE.CLI_ID
-ORDER BY CLI_NOM"
+Q7_req = "SELECT CLI_NOM AS 'Nom', TEL_NUMERO AS 'Numéro de téléphone' FROM T_C
LIENT, T_TELEPHONE WHERE T_CLIENT.CLI_ID=T_TELEPHONE.CLI_ID ORDER BY CLI_NOM"

 ## Question 8
-Q8_req = "SELECT TIT_CODE, T_CLIENT.CLI_PRENOM, T_CLIENT.CLI_NOM
-FROM T_CLIENT
-WHERE T_CLIENT.CLI_NOM= (SELECT T_CLIENT.CLI_NOM FROM T_CLIENT GROUP by
T_CLIENT.CLI_NOM HAVING  COUNT(CLI_NOM)=3) OR T_CLIENT.CLI_NOM= (SELECT T_CLIENT
.CLI_NOM FROM T_CLIENT GROUP by T_CLIENT.CLI_NOM HAVING  COUNT(CLI_NOM)=2)
-
-"
+Q8_req = "SELECT TIT_CODE, T_CLIENT.CLI_PRENOM, T_CLIENT.CLI_NOM FROM T_CLIENT
WHERE T_CLIENT.CLI_NOM= (SELECT T_CLIENT.CLI_NOM FROM T_CLIENT GROUP by T_CLIENT
.CLI_NOM HAVING  COUNT(CLI_NOM)=3) OR T_CLIENT.CLI_NOM= (SELECT T_CLIENT.CLI_NOM
 FROM T_CLIENT GROUP by T_CLIENT.CLI_NOM HAVING  COUNT(CLI_NOM)=2)"

 ## Question 9
-Q9_req = "SELECT CLI_NOM,  COUNT(*) AS Nombre
-FROM T_CLIENT
-GROUP BY CLI_NOM
-HAVING Nombre>=2"
+Q9_req = "SELECT CLI_NOM,  COUNT(*) AS Nombre FROM T_CLIENT GROUP BY CLI_NOM HA
VING Nombre>=2"
 Q9_res = "Benattar=2;Martin=3"

 ## Question 10
-Q10_req = "SELECT AVG(LIF_REMISE_POURCENT) AS "Valeur moyenne des remises en po
urcentage", AVG(LIF_REMISE_MONTANT) AS "Valeur moyenne des remises en montant"
-FROM T_LIGNE_FACTURE"
+Q10_req = "SELECT AVG(LIF_REMISE_POURCENT) AS 'Valeur moyenne des remises en po
urcentage', AVG(LIF_REMISE_MONTANT) AS 'Valeur moyenne des remises en montant' F
ROM T_LIGNE_FACTURE"
 Q10_res = "17;51"

 ## Question 11
-Q11_req = "SELECT max(LIF_REMISE_POURCENT) AS "Valeur maximale des remises en p
ourcentage", max(LIF_REMISE_MONTANT) AS "Valeur maximale des remises en montant"
-FROM T_LIGNE_FACTURE"
+Q11_req = "SELECT max(LIF_REMISE_POURCENT) AS 'Valeur maximale des remises en p
ourcentage', max(LIF_REMISE_MONTANT) AS 'Valeur maximale des remises en montant'
 FROM T_LIGNE_FACTURE"
 Q11_res = "17;51"

 ## Question 12
-Q12_req = "SELECT FAC_ID AS "fac_id1"
-FROM T_LIGNE_FACTURE
-WHERE LIF_REMISE_MONTANT>0 OR LIF_REMISE_POURCENT>0"
+Q12_req = "SELECT FAC_ID AS 'fac_id1' FROM T_LIGNE_FACTURE WHERE LIF_REMISE_MON
TANT>0 OR LIF_REMISE_POURCENT>0"


 ## Question 13
-Q13_req = "SELECT T_FACTURE.CLI_ID
```

```
-FROM T_FACTURE, T_LIGNE_FACTURE
-WHERE (LIF_REMISE_POURCENT>0 OR LIF_REMISE_MONTANT>0) AND T_FACTURE.FAC_ID=T_LI
GNE_FACTURE.FAC_ID"
+Q13_req = "SELECT T_FACTURE.CLI_ID FROM T_FACTURE, T_LIGNE_FACTURE WHERE (LIF_R
EMISE_POURCENT>0 OR LIF_REMISE_MONTANT>0) AND T_FACTURE.FAC_ID=T_LIGNE_FACTURE.F
AC_ID"

 ## Question 14
-Q14_req = "SELECT T_FACTURE.CLI_ID
-FROM T_FACTURE
-
-EXCEPT
-
-SELECT T_FACTURE.CLI_ID
-FROM T_FACTURE, T_LIGNE_FACTURE
-WHERE (LIF_REMISE_POURCENT>0 OR LIF_REMISE_MONTANT>0) AND T_FACTURE.FAC_ID=T_LI
GNE_FACTURE.FAC_ID"
+Q14_req = "SELECT T_FACTURE.CLI_ID FROM T_FACTURE EXCEPT SELECT T_FACTURE.CLI_I
D FROM T_FACTURE, T_LIGNE_FACTURE WHERE (LIF_REMISE_POURCENT>0 OR LIF_REMISE_MON
TANT>0) AND T_FACTURE.FAC_ID=T_LIGNE_FACTURE.FAC_ID"


 ## Question 15
-Q15_req = "SELECT CLI_NOM, CLI_PRENOM, max(LIF_MONTANT)*0.17
-FROM T_CLIENT, T_LIGNE_FACTURE, T_FACTURE
-WHERE T_FACTURE.FAC_ID=T_LIGNE_FACTURE.FAC_ID AND T_FACTURE.CLI_ID=T_CLIENT.CLI
_ID AND LIF_REMISE_POURCENT>0"
+Q15_req = "SELECT CLI_NOM, CLI_PRENOM, max(LIF_MONTANT)*0.17 FROM T_CLIENT, T_L
IGNE_FACTURE, T_FACTURE WHERE T_FACTURE.FAC_ID=T_LIGNE_FACTURE.FAC_ID AND T_FACT
URE.CLI_ID=T_CLIENT.CLI_ID AND LIF_REMISE_POURCENT>0"
 Q15_res ="THIRIOT,Jacky,81.6"
```

```
NOM = "Luri Vañó"
Prenom = "Jorge"
Classe = "MPSI 2"
alpha="2"

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

## Question 2
Q2_req = "SELECT COUNT()
FROM T_CLIENT
;;"
Q2_res = "97"

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

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

UNION

SELECT TIT_CODE, CLI_PRENOM, CLI_NOM
FROM T_CLIENT
WHERE TIT_CODE="Melle."
;;"


## Question 5
Q5_req = "SELECT COUNT()
FROM T_CLIENT
WHERE TIT_CODE="Mme." OR TIT_CODE="Melle."
;;"
Q5_res = "17"

## Question 6
Q6_req = "SELECT CLI_NOM AS "Nom", CLI_PRENOM AS "Prenom"
FROM T_CLIENT
WHERE TIT_CODE="Melle." OR TIT_CODE="Mme."
ORDER BY CLI_NOM"


## Question 7
Q7_req = "SELECT CLI_NOM AS "Nom", TEL_NUMERO AS "Numéro de téléphone"
FROM T_CLIENT, T_TELEPHONE
WHERE T_CLIENT.CLI_ID=T_TELEPHONE.CLI_ID
ORDER BY CLI_NOM"

## Question 8
Q8_req = "SELECT TIT_CODE, T_CLIENT.CLI_PRENOM, T_CLIENT.CLI_NOM
FROM T_CLIENT
WHERE T_CLIENT.CLI_NOM= (SELECT T_CLIENT.CLI_NOM FROM T_CLIENT GROUP by T_CLIENT
.CLI_NOM HAVING  COUNT(CLI_NOM)=3) OR T_CLIENT.CLI_NOM= (SELECT T_CLIENT.CLI_NOM
 FROM T_CLIENT GROUP by T_CLIENT.CLI_NOM HAVING  COUNT(CLI_NOM)=2)

"

## Question 9
Q9_req = "SELECT CLI_NOM,  COUNT(*) AS Nombre
FROM T_CLIENT
GROUP BY CLI_NOM
```

```
HAVING Nombre>=2"
Q9_res = "Benattar=2;Martin=3"

## Question 10
Q10_req = "SELECT AVG(LIF_REMISE_POURCENT) AS "Valeur moyenne des remises en pou
rcentage", AVG(LIF_REMISE_MONTANT) AS "Valeur moyenne des remises en montant"
FROM T_LIGNE_FACTURE"
Q10_res = "17;51"

## Question 11
Q11_req = "SELECT max(LIF_REMISE_POURCENT) AS "Valeur maximale des remises en po
urcentage", max(LIF_REMISE_MONTANT) AS "Valeur maximale des remises en montant"
FROM T_LIGNE_FACTURE"
Q11_res = "17;51"

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


## Question 13
Q13_req = "SELECT T_FACTURE.CLI_ID
FROM T_FACTURE, T_LIGNE_FACTURE
WHERE (LIF_REMISE_POURCENT>0 OR LIF_REMISE_MONTANT>0) AND T_FACTURE.FAC_ID=T_LIG
NE_FACTURE.FAC_ID"

## Question 14
Q14_req = "SELECT T_FACTURE.CLI_ID
FROM T_FACTURE

EXCEPT

SELECT T_FACTURE.CLI_ID
FROM T_FACTURE, T_LIGNE_FACTURE
WHERE (LIF_REMISE_POURCENT>0 OR LIF_REMISE_MONTANT>0) AND T_FACTURE.FAC_ID=T_LIG
NE_FACTURE.FAC_ID"


## Question 15
Q15_req = "SELECT CLI_NOM, CLI_PRENOM, max(LIF_MONTANT)*0.17
FROM T_CLIENT, T_LIGNE_FACTURE, T_FACTURE
WHERE T_FACTURE.FAC_ID=T_LIGNE_FACTURE.FAC_ID AND T_FACTURE.CLI_ID=T_CLIENT.CLI_
ID AND LIF_REMISE_POURCENT>0"
Q15_res ="THIRIOT,Jacky,81.6"
```

```
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_maillard
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

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

=================================== FAILURES ===================================
_____________________________________ test_Q7_req _____________________________________

    def test_Q7_req ():
>       assert requete(sol_Q7_req) == requete(Q7_req)
E       AssertionError: assert [('DUPONT', '...-92-21'), ...] == [('DUPONT', '..
.-52-50'), ...]
E         At index 2 diff: ('DUBOIS', '02-41-58-89-52') != ('DUPONT', '01-44-28-
52-50')
E         Right contains 46 more items, first extra item: ('AIACH', '04-91-52-51
-52')
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 [('BENATTAR',), ('MARTIN',)] == [('BENATTAR',...(
'MARTIN', 2)]
E         At index 0 diff: ('BENATTAR',) != ('BENATTAR', 2)
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 [('BENATTAR',...('MARTIN', 2)] == [(2,), (2,)]
E         At index 0 diff: ('BENATTAR', 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 '(61.0, 95.0)' == '61,95'
E         - (61.0, 95.0)
E         + 61,95

test_TP.py:131: AssertionError
_____________________________________ test_Q11_res _____________________________________

    def test_Q11_res ():
>       assert sol_Q11_res.upper() ==  Q11_res.upper()
E       AssertionError: assert '(61.0, 95)' == '61,95'
E         - (61.0, 95)
E         + 61,95

test_TP.py:137: 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 897 more items, first extra item: (690,)
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,), (3,), ...,), (7,), ...] == [(1,), (1,), ...,), (1,), ...]
E         At index 1 diff: (3,) != (1,)
E         Right contains 1059 more items, first extra item: (9,)
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 "('SILLET', 'JACQUES', 1045)" == 'BENATTAR,PIERRE,1615'
E         - ('SILLET', 'JACQUES', 1045)
E         + BENATTAR,PIERRE,1615

test_TP.py:152: AssertionError
_____________________________________ test_Q15_req _____________________________________

    def test_Q15_req ():
>       assert requete(sol_Q15_req) == requete(Q15_req)
E       AssertionError: assert [('SILLET', 'Jacques', 1045)] == [('AIACH', 'A...
60, 305), ...]
E         At index 0 diff: ('SILLET', 'Jacques', 1045) != ('AIACH', 'Alexandre',
 475, 305)
E         Right contains 89 more items, first extra item: ('ALBERT', 'Christian'
, 95, 549)
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 "('LETERRIER', 'MONIQUE', 21)" == 'BENATTAR,PIERRE,1615'
E         - ('LETERRIER', 'MONIQUE', 21)
E         + BENATTAR,PIERRE,1615

test_TP.py:158: AssertionError
_____________________________________ test_Q15_req2 _____________________________________

    def test_Q15_req2 ():
>       assert requete(sol_Q15_req2) == requete(Q15_req)
E       AssertionError: assert [('LETERRIER', 'Monique', 21)] == [('AIACH', 'A..
.60, 305), ...]
E         At index 0 diff: ('LETERRIER', 'Monique', 21) != ('AIACH', 'Alexandre'
, 475, 305)
E         Right contains 89 more items, first extra item: ('ALBERT', 'Christian'
, 95, 549)
E         Use -v to get the full diff

test_TP.py:161: AssertionError
======================== 11 failed, 11 passed in 1.07s =========================
```

```
NOM = "MAILLARD"
Prenom = "Chloé"
Classe = "MPSI2"
alpha="46"

## 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 = "92"

## 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
.' or TIT_CODE='Melle.';"


## Question 5
Q5_req = "select count(*) from T_CLIENT where TIT_CODE='Mme.' or TIT_CODE='Melle
.';"
Q5_res = "16"

## Question 6
Q6_req = "select CLI_NOM as Noms, CLI_PRENOM as 'Prénoms' from T_CLIENT where TI
T_CODE='Mme.' or TIT_CODE='Melle.' order by CLI_NOM ASC;"


## Question 7
Q7_req = "select CLI_NOM, TEL_NUMERO from T_CLIENT join T_TELEPHONE on T_CLIENT.
CLI_ID=T_TELEPHONE.CLI_ID;"

## Question 8
Q8_req = "select CLI_NOM, count(*) as nb from T_CLIENT group by CLI_NOM having n
b>=2;"

## Question 9
Q9_req = "select count(*) as nb from T_CLIENT group by CLI_NOM having nb>=2;"
Q9_res = "2,2"

## Question 10
Q10_req = "select avg(LIF_REMISE_POURCENT), avg(LIF_REMISE_MONTANT) from T_LIGNE
_FACTURE;"
Q10_res = "61,95"

## Question 11
Q11_req = "select max(LIF_REMISE_POURCENT), max(LIF_REMISE_MONTANT) from T_LIGNE
_FACTURE;"
Q11_res = "61,95"

## Question 12
Q12_req = "select FAC_ID as fac_id1 from T_LIGNE_FACTURE where LIF_REMISE_MONTAN
T!='NULL' or LIF_REMISE_POURCENT!='NULL';"


## Question 13
Q13_req = "select T_CLIENT.CLI_ID from T_CLIENT join T_FACTURE on T_CLIENT.CLI_I
D=T_FACTURE.CLI_ID join T_LIGNE_FACTURE on T_FACTURE.FAC_ID=T_LIGNE_FACTURE.FAC_
ID where LIF_REMISE_MONTANT!='NULL' or LIF_REMISE_POURCENT!='NULL';"

## Question 14
Q14_req = "select T_CLIENT.CLI_ID from T_CLIENT join T_FACTURE on T_CLIENT.CLI_I
D=T_FACTURE.CLI_ID join T_LIGNE_FACTURE on T_FACTURE.FAC_ID=T_LIGNE_FACTURE.FAC_
ID where LIF_REMISE_MONTANT='NULL' and LIF_REMISE_POURCENT='NULL';"
```

```
## Question 15
Q15_req = "select T_CLIENT.CLI_NOM, T_CLIENT.CLI_PRENOM, sum(LIF_REMISE_MONTANT)
, sum(LIF_REMISE_POURCENT) from T_CLIENT join T_FACTURE on T_CLIENT.CLI_ID=T_FAC
TURE.CLI_ID join T_LIGNE_FACTURE on T_FACTURE.FAC_ID=T_LIGNE_FACTURE.FAC_ID grou
p by T_CLIENT.CLI_NOM ;"
Q15_res ="Benattar,Pierre,1615"
```

```
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_marjollet
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

test_TP.py F...F...FF.FFF.FF.FFFF                                        [100%]

=================================== FAILURES ===================================
_____________________________________ test_Q1_req _____________________________________

    def test_Q1_req ():
>       assert requete(sol_Q1_req) == requete(Q1_req)
E       AssertionError: assert [('DUPONT', '...Melle.'), ...] == [('M.', 'DUPO..
.velyne'), ...]
E         At index 0 diff: ('DUPONT', 'Alain', 'M.') != ('M.', 'DUPONT', 'Alain'
)
E         Use -v to get the full diff

test_TP.py:98: AssertionError
_____________________________________ test_Q4_req _____________________________________

    def test_Q4_req ():
>       assert requete(sol_Q4_req) == requete(Q4_req)
E       AssertionError: assert [('DUHAMEL', ... 'Mme.'), ...] == [('Melle.', '..
.onique'), ...]
E         At index 0 diff: ('DUHAMEL', 'Evelyne', 'Melle.') != ('Melle.', 'DUHAM
EL', 'Evelyne')
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', '...-52-56'), ...] == [('DUPONT', '..
.-43-21'), ...]
E         At index 2 diff: ('DUBOIS', '02-41-58-89-52') != ('DUPONT', '01-44-28-
52-50')
E         Right contains 47 more items, first extra item: ('GAL', '04-90-78-10-6
8')
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', 'Martin')
E         Right contains one more item: ('MARTIN', 'Jean-Pierre')
E         Use -v to get the full diff

test_TP.py:125: AssertionError
_____________________________________ test_Q10_res _____________________________________

    def test_Q10_res ():
>       assert sol_Q10_res.upper() ==  Q10_res.upper()
E       AssertionError: assert '(66.0, 100.0)' == 'EN POURCENTA...ONTANT : 2.29'
E         - (66.0, 100.0)
E         + EN POURCENTAGE : 1.79 , EN MONTANT : 2.29
```

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

    def test_Q10_req ():
>       assert requete(sol_Q10_req) == requete(Q10_req)
E       assert [(66.0, 100.0)] == [(2.286885245...655737704918)]
E         At index 0 diff: (66.0, 100.0) != (2.2868852459016393, 1.7906557377049
18)
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 '(66.0, 100)' == 'EN POURCENTA...MONTANT : 100'
E         - (66.0, 100)
E         + EN POURCENTAGE : 66, EN MONTANT : 100

test_TP.py:137: AssertionError
_____________________________________ test_Q12_req _____________________________________

    def test_Q12_req ():
>       assert requete(sol_Q12_req) == requete(Q12_req)
E       assert [(1,), (2,), ...), (27,), ...] == [(1,), (3,), ...,), (2,), ...]
E         At index 1 diff: (2,) != (3,)
E         Right contains 863 more items, first extra item: (712,)
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,), (3,), ...,), (8,), ...] == []
E         Left contains 91 more items, first extra item: (1,)
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', 1200)" == 'NOM,PRENOM,MONTANT'
E         - ('MEDARD', 'JACQUES', 1200)
E         + NOM,PRENOM,MONTANT

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', 1200)] == []
E         Left contains one more item: ('MEDARD', 'Jacques', 1200)
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)" == 'NOM,PRENOM,MONTANT'
E         - ('GARREAU', 'PAUL', 22)
E         + NOM,PRENOM,MONTANT

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
========================= 13 failed, 9 passed in 0.77s =========================

MODIFICATIONS EFFECTUEES SUR LE FICHIER RENDU
=============================================

--- prog.py.orig        2020-06-22 08:24:11.000000000 +0200
+++ prog.py     2020-06-24 14:57:19.000000000 +0200
@@ -4,47 +4,47 @@
 alpha="51"

 ## Question 1
-Q1_req = "SELECT TIT_CODE,CLI_NOM,CLI_PRENOM FROM T_client ;;"
+Q1_req = "SELECT TIT_CODE,CLI_NOM,CLI_PRENOM FROM T_client "

 ## Question 2
-Q2_req = "SELECT COUNT(*) FROM T_client;;"
+Q2_req = "SELECT COUNT(*) FROM T_client"
 Q2_res = "91"

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

 ## Question 4
-Q4_req = "SELECT TIT_CODE,CLI_NOM,CLI_PRENOM FROM T_client WHERE TIT_CODE != 'M
.';;"
+Q4_req = "SELECT TIT_CODE,CLI_NOM,CLI_PRENOM FROM T_client WHERE TIT_CODE != 'M
.'"


 ## Question 5
-Q5_req = "SELECT COUNT (*) FROM T_client WHERE TIT_CODE != 'M.';;"
+Q5_req = "SELECT COUNT (*) FROM T_client WHERE TIT_CODE != 'M.'"
 Q5_res = "16"

 ## Question 6
-Q6_req = "SELECT CLI_NOM AS Noms ,CLI_PRENOM AS Prénoms FROM T_CLIENT WHERE TIT
_CODE != 'M.' ORDER BY Noms ASC ;;"
+Q6_req = "SELECT CLI_NOM AS Noms ,CLI_PRENOM AS Prénoms FROM T_CLIENT WHERE TIT
_CODE != 'M.' ORDER BY Noms ASC "


 ## Question 7
-Q7_req = "SELECT CLI_NOM , TEL_NUMERO FROM T_CLIENT, T_TELEPHONE WHERE T_CLIENT
.CLI_ID=T_TELEPHONE.CLI_ID;;"
+Q7_req = "SELECT CLI_NOM , TEL_NUMERO FROM T_CLIENT, T_TELEPHONE WHERE T_CLIENT
.CLI_ID=T_TELEPHONE.CLI_ID"

 ## Question 8
-Q8_req = "SELECT CLI_NOM,CLI_PRENOM FROM T_CLIENT WHERE CLI_NOM=(SELECT CLI_NOM
 FROM(SELECT CLI_NOM,COUNT(*) AS Nb FROM T_CLIENT GROUP BY CLI_NOM) WHERE Nb>1);
;"
+Q8_req = "SELECT CLI_NOM,CLI_PRENOM FROM T_CLIENT WHERE CLI_NOM=(SELECT CLI_NOM
 FROM(SELECT CLI_NOM,COUNT(*) AS Nb FROM T_CLIENT GROUP BY CLI_NOM) WHERE Nb>1)"

 ## Question 9
-Q9_req = "SELECT CLI_NOM,Nb FROM (SELECT CLI_NOM,COUNT(*) AS Nb FROM T_CLIENT G
ROUP BY CLI_NOM) WHERE Nb>1;;"
+Q9_req = "SELECT CLI_NOM,Nb FROM (SELECT CLI_NOM,COUNT(*) AS Nb FROM T_CLIENT G
ROUP BY CLI_NOM) WHERE Nb>1"
 Q9_res = "MARTIN : 2"
```

```
 ## Question 10
-Q10_req = "SELECT CAST(SUM(LIF_REMISE_MONTANT) AS FLOAT)/CAST(SUM(LIF_QTE) AS F
LOAT), CAST(SUM(LIF_REMISE_POURCENT) as FLOAT)/CAST(SUM(LIF_QTE) AS FLOAT) FROM
T_LIGNE_FACTURE;;"
+Q10_req = "SELECT CAST(SUM(LIF_REMISE_MONTANT) AS FLOAT)/CAST(SUM(LIF_QTE) AS F
LOAT), CAST(SUM(LIF_REMISE_POURCENT) as FLOAT)/CAST(SUM(LIF_QTE) AS FLOAT) FROM
T_LIGNE_FACTURE"
 Q10_res = "en pourcentage : 1.79 , en montant : 2.29"

 ## Question 11
-Q11_req = "SELECT MAX(LIF_REMISE_POURCENT), MAX(LIF_REMISE_MONTANT) FROM T_LIGN
E_FACTURE;;"
+Q11_req = "SELECT MAX(LIF_REMISE_POURCENT), MAX(LIF_REMISE_MONTANT) FROM T_LIGN
E_FACTURE"
 Q11_res = "en pourcentage : 66, en montant : 100"

 ## Question 12
-Q12_req = "SELECT FAC_ID AS fac_id1 FROM T_LIGNE_FACTURE WHERE LIF_REMISE_POURC
ENT OR LIF_REMISE_MONTANT;;"
+Q12_req = "SELECT FAC_ID AS fac_id1 FROM T_LIGNE_FACTURE WHERE LIF_REMISE_POURC
ENT OR LIF_REMISE_MONTANT"


 ## Question 13
```

```
NOM = "MARJOLLET"
Prenom = "Iris"
Classe = "MPSI2"
alpha="51"

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

## Question 2
Q2_req = "SELECT COUNT(*) FROM T_client;;"
Q2_res = "91"

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

## Question 4
Q4_req = "SELECT TIT_CODE,CLI_NOM,CLI_PRENOM FROM T_client WHERE TIT_CODE != 'M.
';;"


## Question 5
Q5_req = "SELECT COUNT (*) FROM T_client WHERE TIT_CODE != 'M.';;"
Q5_res = "16"

## Question 6
Q6_req = "SELECT CLI_NOM AS Noms ,CLI_PRENOM AS Prénoms FROM T_CLIENT WHERE TIT_
CODE != 'M.' ORDER BY Noms ASC ;;"


## Question 7
Q7_req = "SELECT CLI_NOM , TEL_NUMERO FROM T_CLIENT, T_TELEPHONE WHERE T_CLIENT.
CLI_ID=T_TELEPHONE.CLI_ID;;"

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

## Question 9
Q9_req = "SELECT CLI_NOM,Nb FROM (SELECT CLI_NOM,COUNT(*) AS Nb FROM T_CLIENT GR
OUP BY CLI_NOM) WHERE Nb>1;;"
Q9_res = "MARTIN : 2"

## Question 10
Q10_req = "SELECT CAST(SUM(LIF_REMISE_MONTANT) AS FLOAT)/CAST(SUM(LIF_QTE) AS FL
OAT), CAST(SUM(LIF_REMISE_POURCENT) as FLOAT)/CAST(SUM(LIF_QTE) AS FLOAT) FROM T
_LIGNE_FACTURE;;"
Q10_res = "en pourcentage : 1.79 , en montant : 2.29"

## Question 11
Q11_req = "SELECT MAX(LIF_REMISE_POURCENT), MAX(LIF_REMISE_MONTANT) FROM T_LIGNE
_FACTURE;;"
Q11_res = "en pourcentage : 66, en montant : 100"

## Question 12
Q12_req = "SELECT FAC_ID AS fac_id1 FROM T_LIGNE_FACTURE WHERE LIF_REMISE_POURCE
NT OR LIF_REMISE_MONTANT;;"


## Question 13
Q13_req = ""

## Question 14
Q14_req = ""


## Question 15
Q15_req = ""
```

```
Q15_res ="nom,prenom,montant"
```

```
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_martinal
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

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

=================================== FAILURES ===================================
_____________________________________ test_Q7_req _____________________________________

    def test_Q7_req ():
>       assert requete(sol_Q7_req) == requete(Q7_req)
E       AssertionError: assert [('DUPONT', '...-52-56'), ...] == [('DUPONT', '..
.-52-50'), ...]
E         At index 2 diff: ('DUBOIS', '02-41-58-89-52') != ('DUPONT', '01-44-28-
52-50')
E         Right contains 43 more items, first extra item: ('GAL', '04-90-78-10-6
8')
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 [('BENATTAR',), ('MARTIN',)] == [('BENATTAR',...J
ean-Pierre')]
E         At index 0 diff: ('BENATTAR',) != ('BENATTAR', 'Bernard')
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 [('BENATTAR',...('MARTIN', 2)] == [('AIACH', 1)..
.REL', 1), ...]
E         At index 0 diff: ('BENATTAR', 2) != ('AIACH', 1)
E         Right contains 83 more items, first extra item: ('AUZENAT', 1)
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 '(104.0, 138.0)' == '104 ET 138'
E         - (104.0, 138.0)
E         + 104 ET 138

test_TP.py:131: AssertionError
_____________________________________ test_Q11_res _____________________________________

    def test_Q11_res ():
>       assert sol_Q11_res.upper() ==  Q11_res.upper()
E       AssertionError: assert '(104.0, 138)' == '104 ET 138'
E         - (104.0, 138)
E         + 104 ET 138

test_TP.py:137: AssertionError
_____________________________________ test_Q12_req _____________________________________
```

```
    def test_Q12_req ():
>       assert requete(sol_Q12_req) == requete(Q12_req)
E       assert [(1,), (2,), ...), (26,), ...] == []
E         Left contains 378 more items, first extra item: (1,)
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,), (2,), ...,), (6,), ...] == [(1,)]
E         Left contains 86 more items, first extra item: (2,)
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', 1656)" == 'NOM,PRENOM,MONTANT'
E         - ('MEDARD', 'JACQUES', 1656)
E         + NOM,PRENOM,MONTANT

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', 1656)] == []
E         Left contains one more item: ('MEDARD', 'Jacques', 1656)
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)" == 'NOM,PRENOM,MONTANT'
E         - ('GARREAU', 'PAUL', 22)
E         + NOM,PRENOM,MONTANT

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
======================== 11 failed, 11 passed in 0.65s =========================

MODIFICATIONS EFFECTUEES SUR LE FICHIER RENDU
=============================================

--- prog.py.orig        2020-06-22 08:24:13.000000000 +0200
+++ prog.py     2020-06-24 14:57:23.000000000 +0200
@@ -11,18 +11,18 @@
 Q2_res = "87"

 ## Question 3
-Q3_req = "SELECT CLI_NOM, CLI_PRENOM FROM T_CLIENT WHERE TIT_CODE = "Mme." "
+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 ="M
me." OR TIT_CODE ="Melle.""
+Q4_req = "SELECT CLI_NOM, CLI_PRENOM, TIT_CODE FROM T_CLIENT WHERE TIT_CODE =’M
me.’ OR TIT_CODE =’Melle.’"


 ## Question 5
-Q5_req = "SELECT COUNT(*) FROM T_CLIENT WHERE TIT_CODE ="Mme." OR TIT_CODE ="Me
lle.""
+Q5_req = "SELECT COUNT(*) FROM T_CLIENT WHERE TIT_CODE =’Mme.’ OR TIT_CODE =’Me
lle.’"
 Q5_res = "16"

 ## Question 6
-Q6_req = "SELECT CLI_NOM AS "Noms", CLI_PRENOM AS "Prénoms" FROM T_CLIENT WHERE
 TIT_CODE = "Mme." OR TIT_CODE ="Melle." ORDER BY CLI_NOM ASC, CLI_PRENOM ASC "
+Q6_req = "SELECT CLI_NOM AS ’Noms’, CLI_PRENOM AS ’Prénoms’ FROM T_CLIENT WHERE
 TIT_CODE = ’Mme.’ OR TIT_CODE =’Melle.’ ORDER BY CLI_NOM ASC, CLI_PRENOM ASC "


 ## Question 7
@@ -36,17 +36,15 @@
 Q9_res = " MARTIN : 2, BENATTAR :2"

 ## Question 10
-Q10_req = "SELECT AVG(LIF_REMISE_POURCENT), AVG(LIF_REMISE_MONTANT) FROM T_LIGN
E_FACTURE;
-"
+Q10_req = "SELECT AVG(LIF_REMISE_POURCENT), AVG(LIF_REMISE_MONTANT) FROM T_LIGN
E_FACTURE;"
 Q10_res = "104 et 138"

 ## Question 11
-Q11_req = "SELECT MAX(LIF_REMISE_POURCENT), MAX(LIF_REMISE_MONTANT) FROM T_LIGN
E_FACTURE;
-"
+Q11_req = "SELECT MAX(LIF_REMISE_POURCENT), MAX(LIF_REMISE_MONTANT) FROM T_LIGN
E_FACTURE;"
 Q11_res = "104 et 138"

 ## Question 12
-Q12_req = "SELECT FAC_ID AS "fac_id" FROM T_LIGNE_FACTURE WHERE (LIF_REMISE_MON
TANT != NULL OR LIF_REMISE_POURCENT != NULL )"
+Q12_req = "SELECT FAC_ID AS ’fac_id’ FROM T_LIGNE_FACTURE WHERE (LIF_REMISE_MON
TANT != NULL OR LIF_REMISE_POURCENT != NULL )"


 ## Question 13
```

```
NOM = "MARTINAL"
Prenom = "Lucie"
Classe = "MPSI2"
alpha="89"

## 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 = "87"

## 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 ="Mm
e." OR TIT_CODE ="Melle.""


## Question 5
Q5_req = "SELECT COUNT(*) FROM T_CLIENT WHERE TIT_CODE ="Mme." OR TIT_CODE ="Mel
le.""
Q5_res = "16"

## Question 6
Q6_req = "SELECT CLI_NOM AS "Noms", CLI_PRENOM AS "Prénoms" 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, T_TELEPHONE WHERE T_CLIENT.C
LI_ID = T_TELEPHONE.CLI_ID"

## 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 CLI_NOM, COUNT(CLI_PRENOM) FROM T_CLIENT GROUP BY CLI_NOM"
Q9_res = " MARTIN : 2, BENATTAR :2"

## Question 10
Q10_req = "SELECT AVG(LIF_REMISE_POURCENT), AVG(LIF_REMISE_MONTANT) FROM T_LIGNE
_FACTURE;
"
Q10_res = "104 et 138"

## Question 11
Q11_req = "SELECT MAX(LIF_REMISE_POURCENT), MAX(LIF_REMISE_MONTANT) FROM T_LIGNE
_FACTURE;
"
Q11_res = "104 et 138"

## Question 12
Q12_req = "SELECT FAC_ID AS "fac_id" FROM T_LIGNE_FACTURE WHERE (LIF_REMISE_MONT
ANT != NULL OR LIF_REMISE_POURCENT != NULL )"


## Question 13
Q13_req = "SELECT CLI_ID FROM T_CLIENT WHERE T_CLIENT.CLI_ID = ( SELECT CLI_ID F
ROM T_FACTURE WHERE T_FACTURE.FAC_ID = ( SELECT FAC_ID FROM T_LIGNE_FACTURE WHER
E (LIF_REMISE_MONTANT = 138 OR LIF_REMISE_POURCENT = 104 )));"

## Question 14
Q14_req = "SELECT CLI_ID FROM T_CLIENT WHERE T_CLIENT.CLI_ID = ( SELECT CLI_ID F
ROM T_FACTURE WHERE T_FACTURE.FAC_ID = ( SELECT FAC_ID FROM T_LIGNE_FACTURE WHER
E (LIF_REMISE_MONTANT != 138 AND LIF_REMISE_POURCENT != 104 )));"
```

```
## Question 15
Q15_req = ""
Q15_res ="nom,prenom,montant"
```

```
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_meissirel
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

test_TP.py F...F...FF.F.F.F.FFFFF                                        [100%]

=================================== FAILURES ===================================
_____________________________________ test_Q1_req _____________________________________

    def test_Q1_req ():
>       assert requete(sol_Q1_req) == requete(Q1_req)
E       AssertionError: assert [('DUPONT', '...', 'M.'), ...] == [('M.', 'DUPO..
.'Alain'), ...]
E         At index 0 diff: ('DUPONT', 'Alain', 'M.') != ('M.', 'DUPONT', 'Alain'
)
E         Use -v to get the full diff

test_TP.py:98: AssertionError
_____________________________________ test_Q4_req _____________________________________

    def test_Q4_req ():
>       assert requete(sol_Q4_req) == requete(Q4_req)
E       AssertionError: assert [('DAUMIER', ... 'Mme.'), ...] == [(15,)]
E         At index 0 diff: ('DAUMIER', 'Amélie', 'Melle.') != (15,)
E         Left contains 14 more items, first extra item: ('BOYER', 'Martine', 'M
me.')
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', '...-52-56'), ...] == [('DUPONT', '..
.-52-50'), ...]
E         At index 2 diff: ('DUBOIS', '02-41-58-89-52') != ('DUPONT', '01-44-28-
52-50')
E         Right contains 45 more items, first extra item: ('BENATTAR', '04-90-96
-42-03')
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 [('BENATTAR',), ('MARTIN',)] == [('MARTIN', '...'
, 'Bernard')]
E         At index 0 diff: ('BENATTAR',) != ('MARTIN', 'Marc')
E         Right contains 2 more items, first extra item: ('BENATTAR', 'Pierre')
E         Use -v to get the full diff

test_TP.py:125: AssertionError
_____________________________________ test_Q10_res _____________________________________

    def test_Q10_res ():
>       assert sol_Q10_res.upper() ==  Q10_res.upper()
E       AssertionError: assert '(69.0, 103.0)' == '69,103'
E         - (69.0, 103.0)
E         + 69,103
```

```
test_TP.py:131: AssertionError
_____________________________________ test_Q11_res _____________________________________

    def test_Q11_res ():
>       assert sol_Q11_res.upper() ==  Q11_res.upper()
E       AssertionError: assert '(69.0, 103)' == '69,103'
E         - (69.0, 103)
E         + 69,103

test_TP.py:137: AssertionError
_____________________________________ test_Q12_req _____________________________________

    def test_Q12_req ():
>       assert requete(sol_Q12_req) == requete(Q12_req)
E       assert [(1,), (2,), ...), (27,), ...] == [(1,), (3,), ...,), (2,), ...]
E         At index 1 diff: (2,) != (3,)
E         Right contains 863 more items, first extra item: (712,)
E         Use -v to get the full diff

test_TP.py:143: AssertionError
_____________________________________ test_Q14_req _____________________________________

    def test_Q14_req ():
>       assert requete(sol_Q14_req) == requete(Q14_req)
E       assert [] == [(1,), (2,), ...,), (6,), ...]
E         Right contains 90 more items, first extra item: (1,)
E         Use -v to get the full diff

test_TP.py:149: AssertionError
_____________________________________ test_Q15_res _____________________________________

    def test_Q15_res ():
>       assert sol_Q15_res.upper() ==  Q15_res.upper()
E       assert "('SILLET', 'JACQUES', 1133)" == 'NOM,PRENOM,MONTANT'
E         - ('SILLET', 'JACQUES', 1133)
E         + NOM,PRENOM,MONTANT

test_TP.py:152: AssertionError
_____________________________________ test_Q15_req _____________________________________

    def test_Q15_req ():
>       assert requete(sol_Q15_req) == requete(Q15_req)
E       AssertionError: assert [('SILLET', 'Jacques', 1133)] == []
E         Left contains one more item: ('SILLET', 'Jacques', 1133)
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)" == 'NOM,PRENOM,MONTANT'
E         - ('GARREAU', 'PAUL', 22)
E         + NOM,PRENOM,MONTANT

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
======================== 12 failed, 10 passed in 0.75s =========================
```

```
NOM = "MEISSIREL"
Prenom = "ELISE"
Classe = "MPSI2"
alpha="54"

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

## Question 2
Q2_req = "select count(*) from T_CLIENT"
Q2_res = "90"

## Question 3
Q3_req = "select CLI_NOM, CLI_PRENOM from T_CLIENT where TIT_CODE='Mme.'"

## Question 4
Q4_req = "select count(*) from T_CLIENT where TIT_CODE='Mme.' or TIT_CODE='Melle
.'"


## Question 5
Q5_req = "select count(*) from T_CLIENT where TIT_CODE='Mme.' or TIT_CODE='Melle
.'"
Q5_res = "15"

## Question 6
Q6_req = "select CLI_NOM as Nom, CLI_PRENOM as Prénom from T_CLIENT where TIT_CO
DE='Mme.' or TIT_CODE='Melle.' order by CLI_NOM;"


## Question 7
Q7_req = "select CLI_NOM, TEL_NUMERO from T_CLIENT join T_TELEPHONE on T_CLIENT.
CLI_ID=T_TELEPHONE.CLI_ID"

## Question 8
Q8_req = "select CLI_NOM, CLI_PRENOM from T_CLIENT where CLI_NOM in (select CLI_
NOM from T_CLIENT group by CLI_NOM HAVING count(*)>1)"

## Question 9
Q9_req = "select CLI_NOM, count(*) from T_CLIENT group by CLI_NOM having count(*
)>1"
Q9_res = "BENATTAR : 2, MARTIN : 2"

## Question 10
Q10_req = "select avg(LIF_REMISE_POURCENT) AS 'moyenne pourcentage', avg (LIF_RE
MISE_MONTANT)AS 'moyenne montant' from T_LIGNE_FACTURE"
Q10_res = "69,103"

## Question 11
Q11_req = "select max(LIF_REMISE_POURCENT) AS 'maximum pourcentage', max(LIF_REM
ISE_MONTANT)AS 'maximum montant' from T_LIGNE_FACTURE"
Q11_res = "69,103"

## Question 12
Q12_req = "select FAC_ID as fac_id1 from T_LIGNE_FACTURE where LIF_REMISE_MONTAN
T is NOT NULL or LIF_REMISE_POURCENT is NOT NULL"


## Question 13
Q13_req = "SELECT DISTINCT CLI_ID from T_FACTURE where FAC_ID in (select FAC_ID
as fac_id1 from T_LIGNE_FACTURE where LIF_REMISE_MONTANT is NOT NULL or LIF_REMI
SE_POURCENT is NOT NULL)"

## Question 14
Q14_req = "SELECT DISTINCT CLI_ID from T_FACTURE where FAC_ID not in (select FAC
_ID as fac_id1 from T_LIGNE_FACTURE where LIF_REMISE_MONTANT is NOT NULL or LIF_
REMISE_POURCENT is NOT NULL)"
```

```
## Question 15
Q15_req = ""
Q15_res ="nom,prenom,montant"
```

```
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_montibert
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

test_TP.py ..........F.F.FF.FFF.                                         [100%]

=================================== FAILURES ===================================
_____________________________________ test_Q10_res _____________________________________

    def test_Q10_res ():
>       assert sol_Q10_res.upper() ==  Q10_res.upper()
E       AssertionError: assert '(33.0, 67.0)' == 'REMISE_POURC..._MONTANT=67.0'
E         - (33.0, 67.0)
E         + REMISE_POURCENTAGE=33.0, REMISE_MONTANT=67.0

test_TP.py:131: AssertionError
_____________________________________ test_Q11_res _____________________________________

    def test_Q11_res ():
>       assert sol_Q11_res.upper() ==  Q11_res.upper()
E       AssertionError: assert '(33.0, 67)' == 'MAX_POURCENT...AX_MONTANT=67'
E         - (33.0, 67)
E         + MAX_POURCENTAGE=33, MAX_MONTANT=67

test_TP.py:137: AssertionError
_____________________________________ test_Q12_req _____________________________________

    def test_Q12_req ():
>       assert requete(sol_Q12_req) == requete(Q12_req)
E       assert [(1,), (2,), ...), (27,), ...] == [(1,), (3,), ...,), (2,), ...]
E         At index 1 diff: (2,) != (3,)
E         Right contains 848 more items, first extra item: (668,)
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,), (2,), ...,), (6,), ...] == [(1,), (1,), ...,), (1,), ...]
E         At index 1 diff: (2,) != (1,)
E         Right contains 1035 more items, first extra item: (10,)
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 "('SILLET', 'JACQUES', 737)" == 'GARREAU,PAUL,22'
E         - ('SILLET', 'JACQUES', 737)
E         + GARREAU,PAUL,22

test_TP.py:152: AssertionError
_____________________________________ test_Q15_req _____________________________________

    def test_Q15_req ():
>       assert requete(sol_Q15_req) == requete(Q15_req)
E       AssertionError: assert [('SILLET', 'Jacques', 737)] == [('GARREAU', 'Pau
l', 22)]
```

```
E         At index 0 diff: ('SILLET', 'Jacques', 737) != ('GARREAU', 'Paul', 22)
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)" == 'GARREAU,PAUL,22'
E         - ('GARREAU', 'PAUL', 22)
E         ? --       - --    - -  -
E         + GARREAU,PAUL,22

test_TP.py:158: AssertionError
======================== 7 failed, 15 passed in 0.55s ========================

MODIFICATIONS EFFECTUEES SUR LE FICHIER RENDU
=============================================

--- prog.py.orig        2020-06-22 08:24:16.000000000 +0200
+++ prog.py     2020-06-24 14:57:29.000000000 +0200
@@ -4,8 +4,7 @@
 alpha="18"

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

 ## Question 2
 Q2_req = "select count(*) as nb_client from T_CLIENT"
@@ -34,8 +33,7 @@

 ## Question 9
 Q9_req = "SELECT CLI_NOM, count(cli_nom) from T_CLIENT group by CLI_NOM having
count(CLI_NOM)>1"
-Q9_res = "BENATTAR     2
-MARTIN 3"
+Q9_res = "BENATTAR     2 MARTIN        3"

 ## Question 10
 Q10_req = "select avg(LIF_remise_pourcent) as moyenne_pourcent, avg(LIF_remise_
montant) from T_LIGNE_FACTURE"
@@ -53,18 +51,9 @@
 Q13_req = "select T_facture.CLI_ID from T_FACTURE join T_LIGNE_FACTURE on T_LIG
NE_FACTURE.FAC_ID=T_FACTURE.FAC_ID where LIF_REMISE_MONTANT>0 or LIF_REMISE_POUR
CENT>0"

 ## Question 14
-Q14_req = "SELECT T_FACTURE.CLI_ID
-FROM T_FACTURE
-
-EXCEPT
-
-SELECT T_FACTURE.CLI_ID
-FROM T_FACTURE, T_LIGNE_FACTURE
-WHERE (LIF_REMISE_POURCENT>0 OR LIF_REMISE_MONTANT>0) AND T_FACTURE.FAC_ID=T_LI
GNE_FACTURE.FAC_ID"
+Q14_req = "SELECT T_FACTURE.CLI_ID FROM T_FACTURE EXCEPT SELECT T_FACTURE.CLI_I
D FROM T_FACTURE, T_LIGNE_FACTURE WHERE (LIF_REMISE_POURCENT>0 OR LIF_REMISE_MON
TANT>0) AND T_FACTURE.FAC_ID=T_LIGNE_FACTURE.FAC_ID"


 ## Question 15
-Q15_req = "select T_CLIENT.CLI_NOM,T_CLIENT.CLI_PRENOM, max(nb_reduc) from
-(select T_FACTURE.CLI_ID,count(T_FACTURE.CLI_ID) as nb_reduc from T_FACTURE joi
n T_LIGNE_FACTURE on T_LIGNE_FACTURE.FAC_ID=T_FACTURE.FAC_ID where LIF_REMISE_MO
NTANT>0 or LIF_REMISE_POURCENT>0 group by CLI_ID) as c
```

```
-join T_CLIENT on T_CLIENT.CLI_ID=c.CLI_ID"
+Q15_req = "select T_CLIENT.CLI_NOM,T_CLIENT.CLI_PRENOM, max(nb_reduc) from (sel
ect T_FACTURE.CLI_ID,count(T_FACTURE.CLI_ID) as nb_reduc from T_FACTURE join T_L
IGNE_FACTURE on T_LIGNE_FACTURE.FAC_ID=T_FACTURE.FAC_ID where LIF_REMISE_MONTANT
>0 or LIF_REMISE_POURCENT>0 group by CLI_ID) as c join T_CLIENT on T_CLIENT.CLI_
ID=c.CLI_ID"
 Q15_res ="GARREAU,Paul,22"
```

```
NOM = "MONTIBERT"
Prenom = "Louis"
Classe = "MPSI2"
alpha="18"

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

## Question 2
Q2_req = "select count(*) as nb_client from T_CLIENT"
Q2_res = "95"

## 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
.' or TIT_CODE='Melle.'"


## Question 5
Q5_req = "SELECT count(*) FROM T_CLIENT where TIT_CODE='Mme.' or TIT_CODE='Melle
.';"
Q5_res = "16"

## Question 6
Q6_req = "SELECT CLI_NOM as Noms, CLI_PRENOM as Prénoms FROM T_CLIENT where TIT_
CODE='Mme.' or TIT_CODE='Melle.' order by Noms"


## Question 7
Q7_req = "select T_CLIENT.CLI_NOM as Noms, T_TELEPHONE.TEL_NUMERO from T_CLIENT
join T_TELEPHONE on T_TELEPHONE.CLI_ID=T_CLIENT.CLI_ID where T_TELEPHONE.TYP_COD
E='TEL'"

## Question 8
Q8_req = "SELECT CLI_NOM from T_CLIENT group by CLI_NOM having count(CLI_NOM)>1"

## Question 9
Q9_req = "SELECT CLI_NOM, count(cli_nom) from T_CLIENT group by CLI_NOM having c
ount(CLI_NOM)>1"
Q9_res = "BENATTAR      2
MARTIN  3"

## Question 10
Q10_req = "select avg(LIF_remise_pourcent) as moyenne_pourcent, avg(LIF_remise_m
ontant) from T_LIGNE_FACTURE"
Q10_res = "remise_pourcentage=33.0, remise_montant=67.0"

## Question 11
Q11_req = "SELECT max(LIF_remise_pourcent) as max_pourcent, max(LIF_remise_monta
nt) as max_montant from T_LIGNE_FACTURE"
Q11_res = "max_pourcentage=33, max_montant=67"

## Question 12
Q12_req = "select FAC_ID as fact_id1 from T_LIGNE_FACTURE where LIF_REMISE_MONTA
NT>0 or LIF_REMISE_POURCENT>0"


## Question 13
Q13_req = "select T_facture.CLI_ID from T_FACTURE join T_LIGNE_FACTURE on T_LIGN
E_FACTURE.FAC_ID=T_FACTURE.FAC_ID where LIF_REMISE_MONTANT>0 or LIF_REMISE_POURC
ENT>0"

## Question 14
Q14_req = "SELECT T_FACTURE.CLI_ID
FROM T_FACTURE
```

```
EXCEPT

SELECT T_FACTURE.CLI_ID
FROM T_FACTURE, T_LIGNE_FACTURE
WHERE (LIF_REMISE_POURCENT>0 OR LIF_REMISE_MONTANT>0) AND T_FACTURE.FAC_ID=T_LIG
NE_FACTURE.FAC_ID"


## Question 15
Q15_req = "select T_CLIENT.CLI_NOM,T_CLIENT.CLI_PRENOM, max(nb_reduc) from
(select T_FACTURE.CLI_ID,count(T_FACTURE.CLI_ID) as nb_reduc from T_FACTURE join
 T_LIGNE_FACTURE on T_LIGNE_FACTURE.FAC_ID=T_FACTURE.FAC_ID where LIF_REMISE_MON
TANT>0 or LIF_REMISE_POURCENT>0 group by CLI_ID) as c
join T_CLIENT on T_CLIENT.CLI_ID=c.CLI_ID"
Q15_res ="GARREAU,Paul,22"
```

```
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_mostefaoui
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

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

=================================== FAILURES ===================================
_____________________________________ test_Q1_req _____________________________________

    def test_Q1_req ():
>       assert requete(sol_Q1_req) == requete(Q1_req)
E       AssertionError: assert [('DUPONT', '...', 'M.'), ...] == [('M.', 'DUPO..
.'Alain'), ...]
E         At index 0 diff: ('DUPONT', 'Alain', 'M.') != ('M.', 'DUPONT', 'Alain'
)
E         Use -v to get the full diff

test_TP.py:98: AssertionError
_____________________________________ test_Q4_req _____________________________________

    def test_Q4_req ():
>       assert requete(sol_Q4_req) == requete(Q4_req)
E       AssertionError: assert [('DUHAMEL', ... 'Mme.'), ...] == [('Melle.', '..
.onique'), ...]
E         At index 0 diff: ('DUHAMEL', 'Evelyne', 'Melle.') != ('Melle.', 'DUHAM
EL', 'Evelyne')
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)

test_TP.py:122:
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

req = "CREATE TABLE CLI_TEL AS SELECT T_CLIENT.CLI_NOM,T_TELEPHONE.TEL_NUMERO,T_
TELEPHONE.TEL_LOCALISATION FROM T_CLIENT,T_TELEPHONE WHERE TYP_CODE='TEL' AND T_
CLIENT.CLI_ID=T_TELEPHONE.CLI_ID;"

    def requete (req):
        conn = sqlite3.connect('../../bdd/hotel_'+convert(alpha)+'.db')
        c=conn.cursor()
>       c.execute(req)
E       sqlite3.OperationalError: table CLI_TEL already exists

test_TP.py:25: OperationalError
_____________________________________ test_Q8_req _____________________________________

    def test_Q8_req ():
>       assert requete(sol_Q8_req) == requete(Q8_req)

test_TP.py:125:
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

req = 'SELECT CLI_NOM, as nb_occ FROM T_CLIENT WHERE COUNT(CLI_NOM) > 1;'

    def requete (req):
        conn = sqlite3.connect('../../bdd/hotel_'+convert(alpha)+'.db')
```

```
        c=conn.cursor()
>       c.execute(req)
E       sqlite3.OperationalError: near "as": syntax error

test_TP.py:25: OperationalError
_____________________________________ test_Q10_res _____________________________________

    def test_Q10_res ():
>       assert sol_Q10_res.upper() ==  Q10_res.upper()
E       AssertionError: assert '(82.0, 116.0)' == '82.0,116.0'
E         - (82.0, 116.0)
E         ? -     -     -
E         + 82.0,116.0

test_TP.py:131: AssertionError
_____________________________________ test_Q11_res _____________________________________

    def test_Q11_res ():
>       assert sol_Q11_res.upper() ==  Q11_res.upper()
E       AssertionError: assert '(82.0, 116)' == '82,116'
E         - (82.0, 116)
E         + 82,116

test_TP.py:137: AssertionError
_____________________________________ test_Q15_res _____________________________________

    def test_Q15_res ():
>       assert sol_Q15_res.upper() ==  Q15_res.upper()
E       assert "('MEDARD', 'JACQUES', 1392)" == 'NOM,PRENOM,MONTANT'
E         - ('MEDARD', 'JACQUES', 1392)
E         + NOM,PRENOM,MONTANT

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', 1392)] == []
E         Left contains one more item: ('MEDARD', 'Jacques', 1392)
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)" == 'NOM,PRENOM,MONTANT'
E         - ('GARREAU', 'PAUL', 22)
E         + NOM,PRENOM,MONTANT

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
======================== 10 failed, 12 passed in 0.75s =========================
```

```
NOM = "MOSTEFAOUI"
Prenom = "Rayan"
Classe = "MPSI2"
alpha="67"

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

## Question 2
Q2_req = "SELECT COUNT(*) as nbclients FROM T_CLIENT;"
Q2_res = "89"

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

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


## Question 5
Q5_req = "SELECT COUNT(*) as nbclientes FROM (SELECT TIT_CODE,CLI_NOM,CLI_PRENOM
 FROM T_CLIENT WHERE TIT_CODE='Mme.' OR TIT_CODE='Melle.');"
Q5_res = "17"

## Question 6
Q6_req = "SELECT CLI_NOM as Noms, CLI_PRENOM as Prénoms FROM (SELECT TIT_CODE,CL
I_NOM,CLI_PRENOM FROM T_CLIENT WHERE TIT_CODE='Mme.' OR TIT_CODE='Melle.') ORDER
 BY Noms ASC, Prénoms ASC;"


## Question 7
Q7_req = "CREATE TABLE CLI_TEL AS SELECT T_CLIENT.CLI_NOM,T_TELEPHONE.TEL_NUMERO
,T_TELEPHONE.TEL_LOCALISATION FROM T_CLIENT,T_TELEPHONE WHERE TYP_CODE='TEL' AND
 T_CLIENT.CLI_ID=T_TELEPHONE.CLI_ID;"

## Question 8
Q8_req = "SELECT CLI_NOM, as nb_occ FROM T_CLIENT WHERE COUNT(CLI_NOM) > 1;"

## Question 9
Q9_req = "SELECT CLI_NOM, COUNT(*) as nb_occ FROM T_CLIENT GROUP BY CLI_NOM HAVI
NG nb_occ > 1;"
Q9_res = "MARTIN,2"

## Question 10
Q10_req = "SELECT AVG(LIF_REMISE_POURCENT) as moyenne_remise,AVG(LIF_REMISE_MONT
ANT) as moyenne_montant FROM T_LIGNE_FACTURE;"
Q10_res = "82.0,116.0"

## Question 11
Q11_req = "SELECT MAX(LIF_REMISE_POURCENT) as moyenne_remise,MAX(LIF_REMISE_MONT
ANT) as moyenne_montant FROM T_LIGNE_FACTURE;"
Q11_res = "82,116"

## Question 12
Q12_req = "SELECT DISTINCT T_LIGNE_FACTURE.FAC_ID as fac_id1 FROM T_LIGNE_FACTUR
E WHERE LIF_REMISE_MONTANT  NOTNULL OR LIF_REMISE_POURCENT NOTNULL;"


## Question 13
Q13_req = "SELECT DISTINCT T_FACTURE.CLI_ID FROM T_FACTURE JOIN T_LIGNE_FACTURE
ON T_FACTURE.FAC_ID=T_LIGNE_FACTURE.FAC_ID WHERE LIF_REMISE_MONTANT NOTNULL OR L
IF_REMISE_POURCENT NOTNULL;"

## Question 14
Q14_req = "SELECT T_FACTURE.CLI_ID FROM T_FACTURE EXCEPT SELECT DISTINCT T_FACTU
RE.CLI_ID FROM T_FACTURE JOIN T_LIGNE_FACTURE ON T_FACTURE.FAC_ID=T_LIGNE_FACTUR
E.FAC_ID WHERE LIF_REMISE_MONTANT NOTNULL OR LIF_REMISE_POURCENT NOTNULL;"
```

```
## Question 15
Q15_req = ""
Q15_res ="nom,prenom,montant"
```

```
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_novel
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

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

=================================== FAILURES ===================================
_____________________________________ test_Q7_req _____________________________________

    def test_Q7_req ():
>       assert requete(sol_Q7_req) == requete(Q7_req)
E       AssertionError: assert [('DUPONT', '...-92-21'), ...] == [('DUPONT', '..
.-52-50'), ...]
E         At index 2 diff: ('DUBOIS', '02-41-58-89-52') != ('DUPONT', '01-44-28-
52-50')
E         Right contains 47 more items, first extra item: ('LEAL', '04-94-65-66-
67')
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', 'Marc')
E         Right contains 2 more items, first extra item: ('MARTIN', 'Martin')
E         Use -v to get the full diff

test_TP.py:125: AssertionError
_____________________________________ test_Q10_res _____________________________________

    def test_Q10_res ():
>       assert sol_Q10_res.upper() ==  Q10_res.upper()
E       assert '(89.0, 123.0)' == "'89','123'"
E         - (89.0, 123.0)
E         + '89','123'

test_TP.py:131: AssertionError
_____________________________________ test_Q11_res _____________________________________

    def test_Q11_res ():
>       assert sol_Q11_res.upper() ==  Q11_res.upper()
E       assert '(89.0, 123)' == "'89','123'"
E         - (89.0, 123)
E         + '89','123'

test_TP.py:137: AssertionError
_____________________________________ test_Q12_req _____________________________________

    def test_Q12_req ():
>       assert requete(sol_Q12_req) == requete(Q12_req)
E       assert [(1,), (2,), ...), (26,), ...] == [(3,), (4,), ...), (51,), ...]
E         At index 0 diff: (1,) != (3,)
E         Left contains 195 more items, first extra item: (1144,)
E         Use -v to get the full diff

test_TP.py:143: AssertionError
_____________________________________ test_Q15_res _____________________________________
```

```
    def test_Q15_res ():
>       assert sol_Q15_res.upper() ==  Q15_res.upper()
E       assert "('SILLET', 'JACQUES', 1353)" == 'NOM,PRENOM,MONTANT'
E         - ('SILLET', 'JACQUES', 1353)
E         + NOM,PRENOM,MONTANT

test_TP.py:152: AssertionError
_____________________________________ test_Q15_req _____________________________________

    def test_Q15_req ():
>       assert requete(sol_Q15_req) == requete(Q15_req)
E       AssertionError: assert [('SILLET', 'Jacques', 1353)] == []
E         Left contains one more item: ('SILLET', 'Jacques', 1353)
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)" == 'NOM,PRENOM,MONTANT'
E         - ('GARREAU', 'PAUL', 22)
E         + NOM,PRENOM,MONTANT

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
========================== 9 failed, 13 passed in 0.68s ==========================
```

```
NOM = "NOVEL"
Prenom = "Simon"
Classe = "MPSI2"
alpha="74"

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

## Question 2
Q2_req = "SELECT COUNT (*) from (SELECT DISTINCT CLI_ID from T_CLIENT )"
Q2_res = "87"

## 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
.' OR TIT_CODE='Melle.'"


## Question 5
Q5_req = "SELECT COUNT (*) from T_CLIENT WHERE TIT_CODE = 'Mme.' OR TIT_CODE='Me
lle.'"
Q5_res = "15"

## Question 6
Q6_req = "SELECT CLI_NOM as 'Noms' , CLI_PRENOM as 'Prénoms' From T_CLIENT WHERE
 TIT_CODE = 'Mme.' OR TIT_CODE='Melle.' ORDER BY CLI_NOM ASC, CLI_PRENOM ASC "


## Question 7
Q7_req = "SELECT T_CLIENT.CLI_NOM,T_TELEPHONE.TEL_NUMERO from T_CLIENT join T_TE
LEPHONE on T_CLIENT.CLI_ID=T_TELEPHONE.CLI_ID"

## Question 8
Q8_req = "SELECT CLI_NOM,CLI_PRENOM from T_CLIENT JOIN (SELECT CLI_NOM as nom, C
OUNT(CLI_NOM) as nb FROM T_CLIENT GROUP BY CLI_NOM) ON T_CLIENT.CLI_NOM=nom WHER
E nb>1 "

## Question 9
Q9_req = "SELECT CLI_NOM,nb from (SELECT CLI_NOM,COUNT(CLI_NOM) as nb FROM T_CLI
ENT GROUP BY CLI_NOM) WHERE nb>1"
Q9_res = "'MARTIN 3'"

## Question 10
Q10_req = "SELECT avg(LIF_REMISE_POURCENT), avg(LIF_REMISE_MONTANT) FROM T_LIGNE
_FACTURE"
Q10_res = "'89','123'"

## Question 11
Q11_req = "SELECT max(LIF_REMISE_POURCENT), max(LIF_REMISE_MONTANT) FROM T_LIGNE
_FACTURE"
Q11_res = "'89','123'"

## Question 12
Q12_req = "SELECT DISTINCT FAC_ID as 'fac_id1' FROM T_LIGNE_FACTURE where LIF_RE
MISE_MONTANT IS NOT NULL"


## Question 13
Q13_req = "SELECT DISTINCT CLI_ID FROM T_FACTURE join T_LIGNE_FACTURE where T_FA
CTUre.FAC_ID=T_LIGNE_FACTURE.FAC_ID AND T_LIGNE_FACTURE.LIF_REMISE_MONTANT IS NO
T NULL"

## Question 14
Q14_req = ""
```

```
## Question 15
Q15_req = ""
Q15_res ="nom,prenom,montant"
```

```
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_petit
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

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

=================================== FAILURES ===================================
_____________________________________ test_Q2_res _____________________________________

    def test_Q2_res ():
>       assert sol_Q2_res.upper() ==  Q2_res.upper()
E       AssertionError: assert '88' == ''
E         - 88

test_TP.py:101: AssertionError
_____________________________________ test_Q5_res _____________________________________

    def test_Q5_res ():
>       assert sol_Q5_res.upper() ==  Q5_res.upper()
E       AssertionError: assert '15' == ''
E         - 15

test_TP.py:113: AssertionError
_____________________________________ test_Q7_req _____________________________________

    def test_Q7_req ():
>       assert requete(sol_Q7_req) == requete(Q7_req)
E       AssertionError: assert [('DUPONT', '...-92-21'), ...] == [('DUPONT', '..
.-52-50'), ...]
E         At index 2 diff: ('DUBOIS', '02-41-58-89-52') != ('DUPONT', '01-44-28-
52-50')
E         Right contains 44 more items, first extra item: ('AIACH', '04-91-52-51
-52')
E         Use -v to get the full diff

test_TP.py:122: AssertionError
_____________________________________ test_Q9_req _____________________________________

    def test_Q9_req ():
>       assert requete(sol_Q9_req) == requete(Q9_req)
E       AssertionError: assert [('MARTIN', 2)] == []
E         Left contains one more item: ('MARTIN', 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 '(85.0, 119.0)' == ''
E         - (85.0, 119.0)

test_TP.py:131: AssertionError
_____________________________________ test_Q11_res _____________________________________

    def test_Q11_res ():
>       assert sol_Q11_res.upper() ==  Q11_res.upper()
E       AssertionError: assert '(85.0, 119)' == ''
E         - (85.0, 119)
```

```
test_TP.py:137: AssertionError
_____________________________________ test_Q12_req _____________________________________

    def test_Q12_req ():
>       assert requete(sol_Q12_req) == requete(Q12_req)
E       assert [(1,), (2,), ...), (26,), ...] == []
E         Left contains 374 more items, first extra item: (1,)
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,), (3,), ...,), (7,), ...] == []
E         Left contains 88 more items, first extra item: (1,)
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 "('SILLET', 'JACQUES', 1309)" == 'NOM,PRENOM,MONTANT'
E         - ('SILLET', 'JACQUES', 1309)
E         + NOM,PRENOM,MONTANT

test_TP.py:152: AssertionError
_____________________________________ test_Q15_req _____________________________________

    def test_Q15_req ():
>       assert requete(sol_Q15_req) == requete(Q15_req)
E       AssertionError: assert [('SILLET', 'Jacques', 1309)] == []
E         Left contains one more item: ('SILLET', 'Jacques', 1309)
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)" == 'NOM,PRENOM,MONTANT'
E         - ('GARREAU', 'PAUL', 22)
E         + NOM,PRENOM,MONTANT

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
======================== 12 failed, 10 passed in 0.66s =========================
```

```
NOM = "PETIT"
Prenom = "Theo"
Classe = "MPSI2"
alpha="70"

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

## Question 2
Q2_req = "SELECT COUNT (*) from (SELECT DISTINCT CLI_ID from T_CLIENT)"
Q2_res = ""

## 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
.' OR TIT_CODE='Melle.'"


## Question 5
Q5_req = "SELECT COUNT (*) from T_CLIENT WHERE TIT_CODE = 'Mme.' OR TIT_CODE='Me
lle.'"
Q5_res = ""

## Question 6
Q6_req = "SELECT CLI_NOM as 'Noms' , CLI_PRENOM as 'Prénoms' From T_CLIENT WHERE
 TIT_CODE = 'Mme.' OR TIT_CODE='Melle.' ORDER BY CLI_NOM ASC, CLI_PRENOM ASC"


## Question 7
Q7_req = "SELECT T_CLIENT.CLI_NOM,T_TELEPHONE.TEL_NUMERO from T_CLIENT join T_TE
LEPHONE on T_CLIENT.CLI_ID=T_TELEPHONE.CLI_ID"

## Question 8
Q8_req = "SELECT CLI_NOM FROM (SELECT CLI_NOM,count(CLI_NOM) as a FROM T_CLIENT
GROUP BY CLI_NOM) where a > 1"

## Question 9
Q9_req = ""
Q9_res = ""

## Question 10
Q10_req = "SELECT avg(LIF_REMISE_POURCENT), avg(LIF_REMISE_MONTANT) FROM T_LIGNE
_FACTURE"
Q10_res = ""

## Question 11
Q11_req = "SELECT max(LIF_REMISE_POURCENT), max(LIF_REMISE_MONTANT) FROM T_LIGNE
_FACTURE"
Q11_res = ""

## Question 12
Q12_req = ""


## Question 13
Q13_req = ""

## Question 14
Q14_req = ""


## Question 15
Q15_req = ""
Q15_res ="nom,prenom,montant"
```

```
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_prost
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

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

=================================== FAILURES ===================================
_____________________________________ test_Q7_req _____________________________________

    def test_Q7_req ():
>       assert requete(sol_Q7_req) == requete(Q7_req)
E       AssertionError: assert [('DUBOIS', '...-87-87'), ...] == [('BOUVIER', ..
.-92-21'), ...]
E         At index 0 diff: ('DUBOIS', '02-41-58-89-52') != ('BOUVIER', '06-11-86
-78-89')
E         Right contains 44 more items, first extra item: ('CHAMBON', '05-59-03-
54-51')
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 [('BENATTAR',), ('MARTIN',)] == [('MARTIN', '...'
, 'Bernard')]
E         At index 0 diff: ('BENATTAR',) != ('MARTIN', 'Marc')
E         Right contains 3 more items, first extra item: ('MARTIN', 'Jean-Pierre
')
E         Use -v to get the full diff

test_TP.py:125: AssertionError
_____________________________________ test_Q10_res _____________________________________

    def test_Q10_res ():
>       assert sol_Q10_res.upper() ==  Q10_res.upper()
E       AssertionError: assert '(62.0, 96.0)' == '62,96'
E         - (62.0, 96.0)
E         + 62,96

test_TP.py:131: AssertionError
_____________________________________ test_Q11_res _____________________________________

    def test_Q11_res ():
>       assert sol_Q11_res.upper() ==  Q11_res.upper()
E       AssertionError: assert '(62.0, 96)' == '62,96'
E         - (62.0, 96)
E         + 62,96

test_TP.py:137: 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 897 more items, first extra item: (690,)
E         Use -v to get the full diff

test_TP.py:143: AssertionError
```

```
_____________________________________ test_Q15_res _____________________________________

    def test_Q15_res ():
>       assert sol_Q15_res.upper() ==  Q15_res.upper()
E       assert "('MEDARD', 'JACQUES', 1152)" == 'MEDARD,JACQUES,1152'
E         - ('MEDARD', 'JACQUES', 1152)
E         ? --      - --       - - -    -
E         + MEDARD,JACQUES,1152

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', 1152)] == []
E         Left contains one more item: ('MEDARD', 'Jacques', 1152)
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 "('LETERRIER', 'MONIQUE', 21)" == 'MEDARD,JACQUES,1152'
E         - ('LETERRIER', 'MONIQUE', 21)
E         + MEDARD,JACQUES,1152

test_TP.py:158: AssertionError
_____________________________________ test_Q15_req2 _____________________________________

    def test_Q15_req2 ():
>       assert requete(sol_Q15_req2) == requete(Q15_req)
E       AssertionError: assert [('LETERRIER', 'Monique', 21)] == []
E         Left contains one more item: ('LETERRIER', 'Monique', 21)
E         Use -v to get the full diff

test_TP.py:161: AssertionError
========================== 9 failed, 13 passed in 0.65s ==========================

MODIFICATIONS EFFECTUEES SUR LE FICHIER RENDU
=============================================

--- prog.py.orig        2020-06-22 08:24:22.000000000 +0200
+++ prog.py     2020-06-24 14:57:41.000000000 +0200
@@ -11,18 +11,18 @@
 Q2_res = "93"

 ## Question 3
-Q3_req = "SELECT CLI_NOM, CLI_PRENOM FROM T_CLIENT WHERE TIT_CODE="Mme.""
+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="Mm
e." OR TIT_CODE="Melle.""
+Q4_req = "SELECT CLI_NOM, CLI_PRENOM, TIT_CODE FROM T_CLIENT WHERE TIT_CODE='Mm
e.' OR TIT_CODE='Melle.'"


 ## Question 5
-Q5_req = "SELECT COUNT(*) FROM T_CLIENT WHERE TIT_CODE="Mme." OR TIT_CODE="Mell
e.""
+Q5_req = "SELECT COUNT(*) FROM T_CLIENT WHERE TIT_CODE='Mme.' OR TIT_CODE='Mell
e.'"
 Q5_res = "16"

 ## Question 6
-Q6_req = "SELECT CLI_NOM, CLI_PRENOM FROM T_CLIENT WHERE TIT_CODE="Mme." OR TIT
_CODE="Melle." ORDER BY CLI_NOM,CLI_PRENOM ASC"
```

```
+Q6_req = "SELECT CLI_NOM, CLI_PRENOM FROM T_CLIENT WHERE TIT_CODE='Mme.' OR TIT
_CODE='Melle.' ORDER BY CLI_NOM,CLI_PRENOM ASC"


 ## Question 7
```

```
NOM = "PROST"
Prenom = "Gabin"
Classe = "MPSI2"
alpha="47"

## 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 = "93"

## 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
." OR TIT_CODE="Melle.""


## Question 5
Q5_req = "SELECT COUNT(*) FROM T_CLIENT WHERE TIT_CODE="Mme." OR TIT_CODE="Melle
."
Q5_res = "16"

## Question 6
Q6_req = "SELECT CLI_NOM, CLI_PRENOM FROM T_CLIENT WHERE TIT_CODE="Mme." OR TIT_
CODE="Melle." ORDER BY CLI_NOM,CLI_PRENOM ASC"


## Question 7
Q7_req = "SELECT CLI_NOM, TEL_NUMERO FROM T_CLIENT JOIN T_TELEPHONE ON T_CLIENT.
CLI_ID=T_TELEPHONE.CLI_ID"

## Question 8
Q8_req = "SELECT CLI_NOM,CLI_PRENOM FROM T_CLIENT JOIN(SELECT CLI_NOM as nom,COU
NT(CLI_NOM) as cb FROM T_CLIENT GROUP BY CLI_NOM)ON T_CLIENT.CLI_NOM=nom  WHERE
cb>1"

## Question 9
Q9_req = "SELECT CLI_NOM,cb FROM (SELECT CLI_NOM,COUNT(CLI_NOM) as cb FROM T_CLI
ENT GROUP BY CLI_NOM) WHERE cb>1"
Q9_res = "MARTIN, 3, BENATTAR, 2"

## Question 10
Q10_req = "SELECT AVG (LIF_REMISE_POURCENT),AVG(LIF_REMISE_MONTANT) FROM T_LIGNE
_FACTURE"
Q10_res = "62,96"

## Question 11
Q11_req = "SELECT MAX(LIF_REMISE_POURCENT),MAX(LIF_REMISE_MONTANT) FROM T_LIGNE_
FACTURE"
Q11_res = "62,96"

## Question 12
Q12_req = "SELECT FAC_ID as fac_id1 FROM T_LIGNE_FACTURE WHERE LIF_REMISE_MONTAN
T NOT NULL OR LIF_REMISE_POURCENT NOT NULL"


## Question 13
Q13_req = "SELECT DISTINCT CLI_ID FROM T_FACTURE JOIN (SELECT FAC_ID as fac_id1
FROM T_LIGNE_FACTURE WHERE LIF_REMISE_MONTANT NOT NULL OR LIF_REMISE_POURCENT NO
T NULL) ON T_FACTURE.FAC_ID=fac_id1"

## Question 14
Q14_req = "SELECT CLI_ID FROM T_CLIENT EXCEPT SELECT DISTINCT CLI_ID FROM T_FACT
URE JOIN (SELECT FAC_ID as fac_id1 FROM T_LIGNE_FACTURE WHERE LIF_REMISE_MONTANT
 NOT NULL OR LIF_REMISE_POURCENT NOT NULL) ON T_FACTURE.FAC_ID=fac_id1"
```

```
## Question 15
Q15_req = ""
Q15_res ="MEDARD,Jacques,1152"
```

```
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_roux
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

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

=================================== FAILURES ===================================
_____________________________________ test_Q7_req _____________________________________

    def test_Q7_req ():
>       assert requete(sol_Q7_req) == requete(Q7_req)
E       AssertionError: assert [('DUPONT', '...-92-21'), ...] == [('DUPONT', '..
.-52-50'), ...]
E         At index 2 diff: ('DUBOIS', '02-41-58-89-52') != ('DUPONT', '01-44-28-
52-50')
E         Right contains 47 more items, first extra item: ('AIACH', '04-91-52-51
-52')
E         Use -v to get the full diff

test_TP.py:122: AssertionError
_____________________________________ test_Q10_res _____________________________________

    def test_Q10_res ():
>       assert sol_Q10_res.upper() ==  Q10_res.upper()
E       AssertionError: assert '(49.0, 83.0)' == 'POURCENTAGE:... MONTANT:3.25'
E         - (49.0, 83.0)
E         + POURCENTAGE:2.15, MONTANT:3.25

test_TP.py:131: AssertionError
_____________________________________ test_Q10_req _____________________________________

    def test_Q10_req ():
>       assert requete(sol_Q10_req) == requete(Q10_req)
E       assert [(49.0, 83.0)] == [(2.15,)]
E         At index 0 diff: (49.0, 83.0) != (2.15,)
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 '(49.0, 83)' == 'MONTANT:83,POURCENTAGE:49'
E         - (49.0, 83)
E         + MONTANT:83,POURCENTAGE:49

test_TP.py:137: AssertionError
_____________________________________ test_Q11_req _____________________________________

    def test_Q11_req ():
>       assert requete(sol_Q11_req) == requete(Q11_req)
E       assert [(49.0, 83)] == [(83,), (83,)...), (83,), ...]
E         At index 0 diff: (49.0, 83) != (83,)
E         Right contains 593 more items, first extra item: (83,)
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,), ...] == []
E         Left contains 365 more items, first extra item: (1,)
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,), (2,), ...,), (6,), ...] == []
E         Left contains 93 more items, first extra item: (1,)
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 "('SILLET', 'JACQUES', 913)" == 'NOM,PRENOM,MONTANT'
E         - ('SILLET', 'JACQUES', 913)
E         + NOM,PRENOM,MONTANT

test_TP.py:152: AssertionError
_____________________________________ test_Q15_req _____________________________________

    def test_Q15_req ():
>       assert requete(sol_Q15_req) == requete(Q15_req)
E       AssertionError: assert [('SILLET', 'Jacques', 913)] == []
E         Left contains one more item: ('SILLET', 'Jacques', 913)
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)" == 'NOM,PRENOM,MONTANT'
E         - ('GARREAU', 'PAUL', 22)
E         + NOM,PRENOM,MONTANT

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
======================== 11 failed, 11 passed in 1.06s =========================

MODIFICATIONS EFFECTUEES SUR LE FICHIER RENDU
=============================================

--- prog.py.orig        2020-06-22 08:24:23.000000000 +0200
+++ prog.py     2020-06-24 14:57:45.000000000 +0200
@@ -36,13 +36,15 @@
 Q9_res = "BENATTAR 2, MARTIN 3"

 ## Question 10
-Q10_req = "SELECT ROUND((SELECT cast((SELECT sum( LIF_REMISE_POURCENT) FROM T_L
IGNE_FACTURE) as float)/15152) , 2);
- SELECT ROUND((SELECT cast((SELECT sum( LIF_REMISE_MONTANT) FROM T_LIGNE_FACTUR
E) as float)/15152) , 2);"
+Q10_req = "SELECT ROUND((SELECT cast((SELECT sum( LIF_REMISE_POURCENT) FROM T_L
IGNE_FACTURE) as float)/15152) , 2);"
```

```
+
+a="SELECT ROUND((SELECT cast((SELECT sum( LIF_REMISE_MONTANT) FROM T_LIGNE_FACT
URE) as float)/15152) , 2);"
 Q10_res = "pourcentage:2.15, montant:3.25"

 ## Question 11
-Q11_req = "SELECT LIF_REMISE_MONTANT FROM T_LIGNE_FACTURE WHERE LIF_REMISE_MONT
ANT = (SELECT max(LIF_REMISE_MONTANT) FROM T_LIGNE_FACTURE);
-SELECT LIF_REMISE_POURCENT FROM T_LIGNE_FACTURE WHERE LIF_REMISE_POURCENT = (SE
LECT max(LIF_REMISE_POURCENT) FROM T_LIGNE_FACTURE);"
+Q11_req = "SELECT LIF_REMISE_MONTANT FROM T_LIGNE_FACTURE WHERE LIF_REMISE_MONT
ANT = (SELECT max(LIF_REMISE_MONTANT) FROM T_LIGNE_FACTURE);"
+
+b="SELECT LIF_REMISE_POURCENT FROM T_LIGNE_FACTURE WHERE LIF_REMISE_POURCENT =
(SELECT max(LIF_REMISE_POURCENT) FROM T_LIGNE_FACTURE);"
 Q11_res = "Montant:83,Pourcentage:49"

 ## Question 12
```

```
NOM = "ROUX"
Prenom = "Anthony"
Classe = "MPSI2"
alpha="34"

## 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 = "93"

## 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='Mm
e.' OR TIT_CODE='Melle.');"


## Question 5
Q5_req = "SELECT count(*) FROM T_CLIENT WHERE(TIT_CODE='Mme.' OR TIT_CODE='Melle
.');"
Q5_res = "17"

## Question 6
Q6_req = "SELECT CLI_NOM AS Noms, CLI_PRENOM AS Prénoms 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 ON T_CLIENT.
CLI_ID=T_TELEPHONE.CLI_ID;"

## Question 8
Q8_req = "SELECT CLI_NOM FROM T_CLIENT GROUP BY CLI_NOM HAVING count(*)>1;"

## Question 9
Q9_req = "SELECT CLI_NOM, count(*) FROM T_CLIENT GROUP BY CLI_NOM HAVING count(*
)>1;"
Q9_res = "BENATTAR 2, MARTIN 3"

## Question 10
Q10_req = "SELECT ROUND((SELECT cast((SELECT sum( LIF_REMISE_POURCENT) FROM T_LI
GNE_FACTURE) as float)/15152) , 2);
 SELECT ROUND((SELECT cast((SELECT sum( LIF_REMISE_MONTANT) FROM T_LIGNE_FACTURE
) as float)/15152) , 2);"
Q10_res = "pourcentage:2.15, montant:3.25"

## Question 11
Q11_req = "SELECT LIF_REMISE_MONTANT FROM T_LIGNE_FACTURE WHERE LIF_REMISE_MONTA
NT = (SELECT max(LIF_REMISE_MONTANT) FROM T_LIGNE_FACTURE);
SELECT LIF_REMISE_POURCENT FROM T_LIGNE_FACTURE WHERE LIF_REMISE_POURCENT = (SEL
ECT max(LIF_REMISE_POURCENT) FROM T_LIGNE_FACTURE);"
Q11_res = "Montant:83,Pourcentage:49"

## Question 12
Q12_req = ""


## Question 13
Q13_req = ""

## Question 14
Q14_req = ""


## Question 15
```

```
Q15_req = ""
Q15_res ="nom,prenom,montant"
```

```
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_touileb
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

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

=================================== FAILURES ===================================
_____________________________________ test_Q7_req _____________________________________

    def test_Q7_req ():
>       assert requete(sol_Q7_req) == requete(Q7_req)
E       AssertionError: assert [('DUPONT', '...-52-56'), ...] == [('DUPONT', '..
.-52-50'), ...]
E         At index 2 diff: ('DUBOIS', '02-41-58-89-52') != ('DUPONT', '01-44-28-
52-50')
E         Right contains 44 more items, first extra item: ('GAL', '04-90-78-10-6
8')
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 [('BENATTAR',), ('MARTIN',)] == [(2, 'M.', 'M...r
nard', None)]
E         At index 0 diff: ('BENATTAR',) != (2, 'M.', 'MARTIN', 'Marc', 'Transpo
rts MARTIN & fils')
E         Right contains 2 more items, first extra item: (91, 'M.', 'BENATTAR',
'Pierre', None)
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)

test_TP.py:128:
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

req = 'SELECT COUNT(CLI_ID) FROM '

    def requete (req):
        conn = sqlite3.connect('../../bdd/hotel_'+convert(alpha)+'.db')
        c=conn.cursor()
>       c.execute(req)
E       sqlite3.OperationalError: near " ": syntax error

test_TP.py:25: OperationalError
_____________________________________ test_Q10_res _____________________________________

    def test_Q10_res ():
>       assert sol_Q10_res.upper() ==  Q10_res.upper()
E       AssertionError: assert '(93.0, 127.0)' == '93.0,127.0'
E         - (93.0, 127.0)
E         ? -     -     -
E         + 93.0,127.0

test_TP.py:131: AssertionError
```

```
_____________________________________ test_Q11_res _____________________________________

    def test_Q11_res ():
>       assert sol_Q11_res.upper() ==  Q11_res.upper()
E       AssertionError: assert '(93.0, 127)' == '93,127'
E         - (93.0, 127)
E         + 93,127

test_TP.py:137: 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_Q14_req _____________________________________

    def test_Q14_req ():
>       assert requete(sol_Q14_req) == requete(Q14_req)
E       assert [] == [(1,), (2,), ...,), (6,), ...]
E         Right contains 87 more items, first extra item: (1,)
E         Use -v to get the full diff

test_TP.py:149: AssertionError
_____________________________________ test_Q15_res _____________________________________

    def test_Q15_res ():
>       assert sol_Q15_res.upper() ==  Q15_res.upper()
E       assert "('SILLET', 'JACQUES', 1397)" == 'NOM,PRENOM,MONTANT'
E         - ('SILLET', 'JACQUES', 1397)
E         + NOM,PRENOM,MONTANT

test_TP.py:152: AssertionError
_____________________________________ test_Q15_req _____________________________________

    def test_Q15_req ():
>       assert requete(sol_Q15_req) == requete(Q15_req)
E       AssertionError: assert [('SILLET', 'Jacques', 1397)] == []
E         Left contains one more item: ('SILLET', 'Jacques', 1397)
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)" == 'NOM,PRENOM,MONTANT'
E         - ('GARREAU', 'PAUL', 22)
E         + NOM,PRENOM,MONTANT

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
======================== 11 failed, 11 passed in 0.97s =========================
```

```
NOM = "TOUILEB"
Prenom = "Laura"
Classe = "MPSI2"
alpha="78"

## 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 = "87"

## 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 = 'M
me.' OR TIT_CODE = 'Melle.';"


## Question 5
Q5_req = "SELECT COUNT(*) FROM (SELECT  CLI_NOM, CLI_PRENOM,TIT_CODE FROM T_CLIE
NT WHERE TIT_CODE = 'Mme.' OR TIT_CODE = 'Melle.');"
Q5_res = "16"

## Question 6
Q6_req = "SELECT CLI_NOM AS Noms, CLI_PRENOM AS Prénoms FROM (SELECT  CLI_NOM, C
LI_PRENOM,TIT_CODE FROM T_CLIENT WHERE TIT_CODE = 'Mme.' OR TIT_CODE = 'Melle.')
 ORDER BY Noms;"


## Question 7
Q7_req = "SELECT T_CLIENT.CLI_NOM, T_TELEPHONE.TEL_NUMERO FROM T_CLIENT JOIN T_T
ELEPHONE ON T_CLIENT.CLI_ID = T_TELEPHONE.CLI_ID;"

## Question 8
Q8_req = "SELECT * FROM T_CLIENT WHERE CLI_NOM IN (SELECT CLI_NOM FROM T_CLIENT
GROUP BY CLI_NOM HAVING COUNT(CLI_NOM) > 1);"

## Question 9
Q9_req = "SELECT COUNT(CLI_ID) FROM "
Q9_res = "2,2"

## Question 10
Q10_req = "SELECT AVG(LIF_REMISE_POURCENT), AVG(LIF_REMISE_MONTANT) FROM T_LIGNE
_FACTURE;"
Q10_res = "93.0,127.0"

## Question 11
Q11_req = "SELECT max(LIF_REMISE_POURCENT), max(LIF_REMISE_MONTANT) FROM T_LIGNE
_FACTURE;"
Q11_res = "93,127"

## Question 12
Q12_req = "SELECT FAC_ID AS fac_id1 FROM T_LIGNE_FACTURE WHERE LIF_REMISE_POURCE
NT NOT NULL OR LIF_REMISE_MONTANT NOT NULL;"


## Question 13
Q13_req = "SELECT DISTINCT CLI_ID FROM T_FACTURE JOIN T_LIGNE_FACTURE ON T_LIGNE
_FACTURE.FAC_ID = T_FACTURE.FAC_ID WHERE LIF_REMISE_POURCENT NOT NULL OR LIF_REM
ISE_MONTANT NOT NULL;"

## Question 14
Q14_req = "SELECT DISTINCT CLI_ID FROM T_FACTURE JOIN T_LIGNE_FACTURE ON T_LIGNE
_FACTURE.FAC_ID = T_FACTURE.FAC_ID WHERE LIF_REMISE_POURCENT IS NULL AND LIF_REM
ISE_MONTANT IS NULL;"
```

```
## Question 15
Q15_req = ""
Q15_res ="nom,prenom,montant"
```

```
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_vialy
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

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

=================================== FAILURES ===================================
_____________________________________ test_Q4_req _____________________________________

    def test_Q4_req ():
>       assert requete(sol_Q4_req) == requete(Q4_req)
E       AssertionError: assert [('DUHAMEL', ... 'Mme.'), ...] == [('DUHAMEL', ..
.onique'), ...]
E         At index 0 diff: ('DUHAMEL', 'Evelyne', 'Melle.') != ('DUHAMEL', 'Evel
yne')
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'), ...] == []
E         Left contains 112 more items, first extra item: ('DUPONT', '01-45-42-5
6-63')
E         Use -v to get the full diff

test_TP.py:122: AssertionError
_____________________________________ test_Q10_res _____________________________________

    def test_Q10_res ():
>       assert sol_Q10_res.upper() ==  Q10_res.upper()
E       AssertionError: assert '(75.0, 109.0)' == '75.0, 109.0'
E         - (75.0, 109.0)
E         ? -           -
E         + 75.0, 109.0

test_TP.py:131: AssertionError
_____________________________________ test_Q11_res _____________________________________

    def test_Q11_res ():
>       assert sol_Q11_res.upper() ==  Q11_res.upper()
E       AssertionError: assert '(75.0, 109)' == '75, 109'
E         - (75.0, 109)
E         ? -  --     -
E         + 75, 109

test_TP.py:137: AssertionError
_____________________________________ test_Q12_req _____________________________________

    def test_Q12_req ():
>       assert requete(sol_Q12_req) == requete(Q12_req)
E       assert [(1,), (2,), ...), (27,), ...] == [(1,), (3,), ...,), (2,), ...]
E         At index 1 diff: (2,) != (3,)
E         Right contains 864 more items, first extra item: (712,)
E         Use -v to get the full diff

test_TP.py:143: AssertionError
_____________________________________ test_Q15_res _____________________________________
```

```
    def test_Q15_res ():
>       assert sol_Q15_res.upper() ==  Q15_res.upper()
E       assert "('SILLET', 'JACQUES', 1199)" == 'NOM,PRENOM,MONTANT'
E         - ('SILLET', 'JACQUES', 1199)
E         + NOM,PRENOM,MONTANT

test_TP.py:152: AssertionError
_____________________________________ test_Q15_req _____________________________________

    def test_Q15_req ():
>       assert requete(sol_Q15_req) == requete(Q15_req)
E       AssertionError: assert [('SILLET', 'Jacques', 1199)] == []
E         Left contains one more item: ('SILLET', 'Jacques', 1199)
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)" == 'NOM,PRENOM,MONTANT'
E         - ('GARREAU', 'PAUL', 22)
E         + NOM,PRENOM,MONTANT

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
========================== 9 failed, 13 passed in 1.65s ==========================

MODIFICATIONS EFFECTUEES SUR LE FICHIER RENDU
=============================================

--- prog.py.orig        2020-06-22 08:24:26.000000000 +0200
+++ prog.py     2020-06-24 14:57:55.000000000 +0200
@@ -14,8 +14,7 @@
 Q3_req = "select CLI_NOM, CLI_PRENOM from T_CLIENT where TIT_CODE='Mme.'"

 ## Question 4
-Q4_req = "select CLI_NOM, CLI_PRENOM from T_CLIENT where TIT_CODE='Mme.' or TIT
_CODE='Melle.'
-"
+Q4_req = "select CLI_NOM, CLI_PRENOM from T_CLIENT where TIT_CODE='Mme.' or TIT
_CODE='Melle.'"


 ## Question 5
```

```
NOM = "VIALY"
Prenom = "Carla"
Classe = "MPSI2"
alpha="60"

## 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 = "89"

## 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 from T_CLIENT where TIT_CODE=’Mme.’ or TIT_
CODE=’Melle.’
"


## Question 5
Q5_req = "select count(*) from T_CLIENT where TIT_CODE!=’M.’"
Q5_res = "16"

## Question 6
Q6_req = "select CLI_NOM as ’Noms’,CLI_PRENOM as ’Prénoms’ from T_CLIENT where T
IT_CODE!=’M.’ order by CLI_NOM"


## Question 7
Q7_req = ""

## Question 8
Q8_req = "select CLI_NOM from T_CLIENT group by CLI_NOM having count(CLI_NOM)>1"

## Question 9
Q9_req = "select CLI_NOM, count(CLI_NOM) from T_CLIENT group by CLI_NOM having c
ount(CLI_NOM)>1"
Q9_res = "BENATTAR 2, MARTIN 3"

## Question 10
Q10_req = "select avg(LIF_REMISE_POURCENT), avg(LIF_REMISE_MONTANT) from T_LIGNE
_FACTURE"
Q10_res = "75.0, 109.0"

## Question 11
Q11_req = "select max(LIF_REMISE_POURCENT), max(LIF_REMISE_MONTANT) from T_LIGNE
_FACTURE"
Q11_res = "75, 109"

## Question 12
Q12_req = "select FAC_ID as fac_id1 from T_LIGNE_FACTURE where LIF_REMISE_MONTAN
T=109 or LIF_REMISE_POURCENT=75"


## Question 13
Q13_req = "select distinct CLI_ID from T_FACTURE JOIN (select FAC_ID as fac_id1
from T_LIGNE_FACTURE where LIF_REMISE_MONTANT=109 or LIF_REMISE_POURCENT=75) on
T_FACTURE.FAC_ID=fac_id1"

## Question 14
Q14_req = "select CLI_ID from T_CLIENT except select distinct CLI_ID from T_FACT
URE JOIN (select FAC_ID as fac_id1 from T_LIGNE_FACTURE where LIF_REMISE_MONTANT
=109 or LIF_REMISE_POURCENT=75) on T_FACTURE.FAC_ID=fac_id1"


## Question 15
```

```
Q15_req = ""
Q15_res ="nom,prenom,montant"
```

```
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_wolff
plugins: timeout-1.3.4
timeout: 60.0s
timeout method: signal
timeout func_only: False
collected 22 items

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

=================================== FAILURES ===================================
_____________________________________ test_Q7_req _____________________________________

    def test_Q7_req ():
>       assert requete(sol_Q7_req) == requete(Q7_req)
E       AssertionError: assert [('DUPONT', '...-87-87'), ...] == [('DUPONT', '..
.-52-50'), ...]
E         At index 2 diff: ('DUBOIS', '02-41-58-89-52') != ('DUPONT', '01-44-28-
52-50')
E         Right contains 46 more items, first extra item: ('GAL', '04-90-78-10-6
8')
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', 'Marc')
E         Right contains one more item: ('MARTIN', 'Jean-Pierre')
E         Use -v to get the full diff

test_TP.py:125: AssertionError
_____________________________________ test_Q10_res _____________________________________

    def test_Q10_res ():
>       assert sol_Q10_res.upper() ==  Q10_res.upper()
E       AssertionError: assert '(94.0, 128.0)' == '94.0 ET 128.0'
E         - (94.0, 128.0)
E         ? -    ^      -
E         + 94.0 ET 128.0
E         ?     ^^^

test_TP.py:131: AssertionError
_____________________________________ test_Q11_res _____________________________________

    def test_Q11_res ():
>       assert sol_Q11_res.upper() ==  Q11_res.upper()
E       AssertionError: assert '(94.0, 128)' == '94 ET 128'
E         - (94.0, 128)
E         + 94 ET 128

test_TP.py:137: 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_Q15_res _____________________________________

    def test_Q15_res ():
>       assert sol_Q15_res.upper() ==  Q15_res.upper()
E       assert "('DUQUESNAY'...CQUES', 1536)" == 'NOM,PRENOM,MONTANT'
E         - ('DUQUESNAY', 'JACQUES', 1536)
E         + NOM,PRENOM,MONTANT

test_TP.py:152: AssertionError
_____________________________________ test_Q15_req _____________________________________

    def test_Q15_req ():
>       assert requete(sol_Q15_req) == requete(Q15_req)
E       AssertionError: assert [('DUQUESNAY'...cques', 1536)] == []
E         Left contains one more item: ('DUQUESNAY', 'Jacques', 1536)
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)" == 'NOM,PRENOM,MONTANT'
E         - ('GARREAU', 'PAUL', 22)
E         + NOM,PRENOM,MONTANT

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
========================== 9 failed, 13 passed in 0.68s ==========================

MODIFICATIONS EFFECTUEES SUR LE FICHIER RENDU
=============================================

--- prog.py.orig        2020-06-22 08:24:28.000000000 +0200
+++ prog.py     2020-06-24 14:58:01.000000000 +0200
@@ -11,23 +11,18 @@
 Q2_res = "88"

 ## Question 3
-Q3_req = "SELECT CLI_NOM, CLI_PRENOM FROM T_CLIENT
-WHERE TIT_CODE='Mme.'"
+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.' or TIT_CODE='Melle.'"
+Q4_req = "SELECT CLI_NOM, CLI_PRENOM, TIT_CODE FROM T_CLIENT WHERE TIT_CODE='Mm
e.' or TIT_CODE='Melle.'"


 ## Question 5
-Q5_req = "SELECT COUNT(*) as nb_clientes FROM T_CLIENT
-WHERE TIT_CODE='Mme.' or TIT_CODE='Melle.'"
+Q5_req = "SELECT COUNT(*) as nb_clientes FROM T_CLIENT WHERE TIT_CODE='Mme.' or
 TIT_CODE='Melle.'"
 Q5_res = "17"

 ## Question 6
-Q6_req = "SELECT CLI_NOM, CLI_PRENOM FROM T_CLIENT
-WHERE TIT_CODE='Mme.' or TIT_CODE='Melle.'
```

```
-ORDER by CLI_NOM ASC, CLI_PRENOM ASC"
+Q6_req = "SELECT CLI_NOM, CLI_PRENOM FROM T_CLIENT WHERE TIT_CODE='Mme.' or TIT
_CODE='Melle.' ORDER by CLI_NOM ASC, CLI_PRENOM ASC"


 ## Question 7
```

```
NOM = "WOLFF"
Prenom = "Corentin"
Classe = "MPSI2"
alpha="79"

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

## Question 2
Q2_req = "SELECT COUNT(*) as nb_personnes 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.' or TIT_CODE='Melle.'"


## Question 5
Q5_req = "SELECT COUNT(*) as nb_clientes FROM T_CLIENT
WHERE TIT_CODE='Mme.' or TIT_CODE='Melle.'"
Q5_res = "17"

## Question 6
Q6_req = "SELECT CLI_NOM, CLI_PRENOM FROM T_CLIENT
WHERE TIT_CODE='Mme.' or TIT_CODE='Melle.'
ORDER by CLI_NOM ASC, CLI_PRENOM ASC"


## Question 7
Q7_req = "SELECT T_CLIENT.CLI_NOM, T_TELEPHONE.TEL_NUMERO FROM T_CLIENT JOIN T_T
ELEPHONE on T_CLIENT.CLI_ID=T_TELEPHONE.CLI_ID"

## Question 8
Q8_req = "SELECT T_CLIENT.CLI_NOM, T_CLIENT.CLI_PRENOM FROM T_CLIENT WHERE T_CLI
ENT.CLI_NOM= (SELECT T_CLIENT.CLI_NOM FROM T_CLIENT GROUP by    T_CLIENT.CLI_NOM
 HAVING  count(CLI_NOM)>1)"

## Question 9
Q9_req = "SELECT T_CLIENT.CLI_NOM,count(*) as nb_occurence FROM T_CLIENT WHERE T
_CLIENT.CLI_NOM=(SELECT T_CLIENT.CLI_NOM FROM T_CLIENT WHERE T_CLIENT.CLI_NOM= (
SELECT T_CLIENT.CLI_NOM FROM T_CLIENT GROUP by T_CLIENT.CLI_NOM HAVING  count(CL
I_NOM)>1))"
Q9_res = "2"

## Question 10
Q10_req = "SELECT AVG(LIF_REMISE_POURCENT), AVG(LIF_REMISE_MONTANT) FROM T_LIGNE
_FACTURE"
Q10_res = "94.0 et 128.0"

## Question 11
Q11_req = "SELECT MAX(LIF_REMISE_POURCENT), MAX(LIF_REMISE_MONTANT) FROM T_LIGNE
_FACTURE"
Q11_res = "94 et 128"

## Question 12
Q12_req = "SELECT FAC_ID AS fac_id1 FROM T_LIGNE_FACTURE WHERE LIF_REMISE_POURCE
NT NOT NULL OR LIF_REMISE_MONTANT NOT NULL"


## Question 13
Q13_req = "SELECT DISTINCT CLI_ID FROM T_FACTURE JOIN T_LIGNE_FACTURE ON T_LIGNE
_FACTURE.FAC_ID = T_FACTURE.FAC_ID WHERE LIF_REMISE_POURCENT NOT NULL OR LIF_REM
ISE_MONTANT NOT NULL"
```

```
## Question 14
Q14_req = ""


## Question 15
Q15_req = ""
Q15_res ="nom,prenom,montant"
```