Praca domowa 3 – Piotr Zajączkowski

Zadanie 1:

```
HOMEWORK> SELECT VISIT.COUNTRY,
              VISITORS.VISITOR_COUNTRY,
              VISITORS.VISITS_RANKING
       FROM (SELECT C.COUNTRY,
                  DENSE_RANK() OVER (ORDER BY SUM(V.NUMBER_OF_VISITS) DESC) AS VISITS_RANKING
             FROM VISIT V
                  JOIN CITY C ON C.ID_CITY = V.ID_CITY
             GROUP BY C.COUNTRY) VISIT,
            (SELECT VC.VISITOR_COUNTRY,
                  DENSE_RANK() OVER (ORDER BY SUM(V.NUMBER_OF_VISITORS) DESC) AS VISITS_RANKING
             FROM VISIT V
                  JOIN VISITORCOUNTRY VC ON VC.ID_COUNTRY = V.ID_COUNTRY
             GROUP BY VC.VISITOR_COUNTRY) VISITORS
       WHERE VISIT.VISITS_RANKING = VISITORS.VISITS_RANKING
[2024-04-10 20:54:32] 10 rows retrieved starting from 1 in 143 ms (execution: 79 ms, fetching: 64 ms)
```

	COUNTRY	VISITOR_COUNTRY	VISITS_RANKING
1	Spain	Poland	1
2	Ecuador	Estonia	2
3	Italy	Ireland	3
4	Poland	Sweden	4
5	Poland	Norway	4
6	France	Finland	5
7	Germany	Canada	6
8	Germany	Australia	6
9	Peru	Singapore	7
10	Chile	Germany	8

Zadanie 2:

```
HOMEWORK> SELECT VT.DESCRIPTION                                                    AS VISIT_TYPE,
              DECODE(T.YEAR, NULL, 'SUMMARY:', T.YEAR)                             AS YEAR,
              DECODE(T.MONTH, NULL, '-------', T.MONTH)                               AS MONTH,
              TO_CHAR(SUM(V.PROFIT), '$9999.9')                                   AS PROFIT,
              DECODE(T.MONTH, NULL, '-------', ROUND(AVG(SUM(V.PROFIT))
                                      OVER (PARTITION BY VT.DESCRIPTION
                                          ORDER BY T.YEAR, T.MONTH
                                          ROWS BETWEEN 1 PRECEDING AND 2 FOLLOWING ), 2)) AS AVERAGE
         FROM VISIT V
              JOIN VISITTYPE VT ON VT.ID_VISIT_TYPE = V.ID_VISIT_TYPE
              JOIN TIME T ON T.ID_TIME = V.ID_TIME
         GROUP BY GROUPING SETS ( (VT.DESCRIPTION, T.YEAR, T.MONTH), VT.DESCRIPTION)
         ORDER BY VT.DESCRIPTION, T.YEAR, T.MONTH
[2024-04-10 20:56:55] 26 rows retrieved starting from 1 in 124 ms (execution: 75 ms, fetching: 49 ms)
```

	VISIT_TYPE	YEAR	MONTH	PROFIT	AVERAGE
1	Business	2013	1	$278.0	137,67
2	Business	2014	9	$105.0	118,25
3	Business	2018	1	$30.0	167
4	Business	2018	11	$60.0	187,67
5	Business	SUMMARY:	-------	$473.0	-------
6	Individual	2013	1	$573.0	254,33
7	Individual	2013	11	$80.0	193,25
8	Individual	2014	9	$110.0	60
9	Individual	2014	10	$10.0	48
10	Individual	2015	7	$40.0	25,5
11	Individual	2016	7	$32.0	37
12	Individual	2017	2	$20.0	29,5
13	Individual	2017	3	$56.0	29,5
14	Individual	2017	4	$10.0	32
15	Individual	2018	1	$32.0	266,25
16	Individual	2018	12	$30.0	351,67
17	Individual	SUMMARY:	-------	$993.0	-------
18	Organized group	2013	1	$87.0	69
19	Organized group	2013	11	$70.0	56,75
20	Organized group	2014	9	$50.0	43
21	Organized group	2014	11	$20.0	40,5
22	Organized group	2016	5	$32.0	29,25
23	Organized group	2016	8	$60.0	29,25
24	Organized group	2017	3	$5.0	107,25
25	Organized group	2018	1	$20.0	123
26	Organized group	SUMMARY:	-------	$344.0	-------

Zadanie 3:

```
HOMEWORK> SELECT *
         FROM (SELECT DECODE(C.CONTINENT, NULL, 'TOTAL:', C.CONTINENT)                    AS CONTINENT,
                      DECODE(UPPER(VT.DESCRIPTION), NULL, 'TOTAL', UPPER(VT.DESCRIPTION)) AS VISIT_TYPE,
                      SUM(V.NUMBER_OF_VISITS)                                             AS SUM_VISITORS,
                      ROUND(AVG(V.NUMBER_OF_VISITS), 2)                                   AS AVG_VISITORS
               FROM VISIT V
                       JOIN CITY C ON C.ID_CITY = V.ID_CITY
                       JOIN VISITTYPE VT ON VT.ID_VISIT_TYPE = V.ID_VISIT_TYPE
               GROUP BY CUBE (C.CONTINENT, VT.DESCRIPTION))
              PIVOT (SUM(SUM_VISITORS) AS SUM, AVG(AVG_VISITORS) AS AVG FOR VISIT_TYPE
              IN ('BUSINESS', 'INDIVIDUAL', 'ORGANIZED GROUP', 'TOTAL'))
         ORDER BY 1
[2024-04-10 20:59:17] 3 rows retrieved starting from 1 in 67 ms (execution: 21 ms, fetching: 46 ms)
```

CONTINENT	'BUSINESS'_SUM	'BUSINES...	'INDIVIDUA...	'INDIVIDU...	'ORGANIZ...	'ORGANIZED GROU...	'TOTAL'_SUM	'TOTAL'_AVG
1 Europe	470	78.33	2150	89.58	850	70.83	3470	82.62
2 South America	645	107.5	555	111	100	100	1300	108.33
3 TOTAL:	1115	92.92	2705	93.28	950	73.08	4770	88.33

Zadanie 4:

```
HOMEWORK> SELECT YEAR,
              SUM(PROFIT)                                          AS QUARTER_PROFIT,
              ROUND(RATIO_TO_REPORT(SUM(PROFIT)) OVER () * 100, 1) || '%' AS PERCENTAGE
         FROM (SELECT T.YEAR,
                     A.NAME                                          AS ACCOMODATION_TYPE,
                     SUM(V.PROFIT)                                   AS PROFIT,
                     NTILE(4) OVER (PARTITION BY T.YEAR ORDER BY SUM(V.PROFIT) DESC) AS CWIARTKA
               FROM VISIT V
                     JOIN TIME T ON T.ID_TIME = V.ID_TIME
                     JOIN ACCOMMODATIONTYPE A ON A.ID_TYPE = V.ID_TYPE
               GROUP BY T.YEAR, A.NAME)
         WHERE CWIARTKA = 1
         GROUP BY YEAR
[2024-04-10 21:04:06] 6 rows retrieved starting from 1 in 51 ms (execution: 21 ms, fetching: 30 ms)
```

YEAR	QUARTER_PROFIT	PERCENTAGE
1 2013	736	65,2%
2 2014	180	15,9%
3 2015	20	1,8%
4 2016	60	5,3%
5 2017	71	6,3%
6 2018	62	5,5%

Zadanie 5:

```
HOMEWORK> SELECT VC.VISITOR_COUNTRY,
              DECODE(C.COUNTRY, NULL, '--NO DATA--', C.COUNTRY) AS COUNTRY_TO_VISIT,
              DECODE(SUM(V.NUMBER_OF_VISITORS), NULL, 0,
                  SUM(V.NUMBER_OF_VISITORS))                AS VISITORS,
              TO_CHAR(DECODE(C.COUNTRY, NULL, 0, RATIO_TO_REPORT(SUM(V.NUMBER_OF_VISITORS))
                                                  OVER (PARTITION BY VC.VISITOR_COUNTRY) * 100),
                  '990.9')                                  AS PERCENTAGE
          FROM VISITORCOUNTRY VC
              LEFT JOIN VISIT V ON VC.ID_COUNTRY = V.ID_COUNTRY
              LEFT JOIN CITY C ON C.ID_CITY = V.ID_CITY
          GROUP BY VC.VISITOR_COUNTRY, C.COUNTRY
          ORDER BY 1, 2
[2024-04-10 21:05:26] 28 rows retrieved starting from 1 in 50 ms (execution: 18 ms, fetching: 32 ms)
```

	VISITOR_COUNTRY	COUNTRY_TO_VISIT	VISITORS	PERCENTAGE
4	Estonia	Germany	40	6.2
5	Estonia	Spain	400	61.5
6	Finland	Italy	270	77.1
7	Finland	Spain	80	22.9
8	Germany	Italy	130	100.0
9	India	Germany	120	100.0
10	Ireland	Ecuador	120	30.0
11	Ireland	Germany	80	20.0
12	Ireland	Italy	200	50.0
13	Japan	Spain	120	100.0
14	Lithuania	Spain	40	100.0
15	Mexico	--NO DATA--	0	0.0
16	Norway	France	380	100.0
17	Peru	--NO DATA--	0	0.0
18	Poland	Chile	200	16.9
19	Poland	Ecuador	240	20.3
20	Poland	Poland	740	62.7
21	Singapore	Spain	180	100.0
22	Spain	Spain	20	100.0
23	Sweden	Peru	100	26.3
24	Sweden	Poland	280	73.7
25	The Netherlands	Ecuador	10	100.0
26	Tunesia	--NO DATA--	0	0.0
27	Turkey	Italy	90	100.0
28	USA	Ecuador	120	100.0

Zadanie 6:

Geography

- [ ] United States,Albuquerque,New Mexico
- [ ] United States,Anaheim,California
- [ ] United States,Antioch,California
- [ ] United States,Apple Valley,California
- [ ] United States,Arvada,Colorado
- [ ] United States,Auburn,Washington
- [ ] United States,Aurora,Colorado
- [ ] United States,Avondale,Arizona
- [ ] United States,Bakersfield,California
- [ ] United States,Bellevue,Washington
- [ ] United States,Bellingham,Washington

Category	Sum of Profit
Accessories	16 484,60
Appliances	8 261,27
Art	2 374,10
Binders	16 096,80
Bookcases	-1 646,51
Chairs	4 027,58
Copiers	19 327,24
Envelopes	1 908,76
Fasteners	275,19
Furnishings	7 641,27
Labels	2 303,12
Machines	-618,93
Paper	12 119,24
Phones	9 110,74
Storage	8 645,32
Total	**108 418,45**

Sum of Profit and Cost by Year and Quarter

Sum of Profit by Country