RBD LAB 5

Utworzyć tabele z danymi

KIEROWCA

id	imie	nazwisko	kategoria	wiek
1	jan	kowal	B	28
2	damian	dowbor	B	25
3	justyna	lis	B	30
4	pawel	cis	C	40
5	paulina	wilk	A	50
6	pawel	lis	B	20

POJAZD

id	marka	model	nr_rej	id_kierowcy
1	Vw	polo	GD 1234s	1
2	Vw	golf	GD 1884s	2
3	audi	q7	GDA 652mn	1
4	mazda	cx-3	GA LOPEK	3
5	renault	clio	GD 1234s	NULL

PASAZER

id	imie	nazwisko	id_pojazdu
1	kaziu	kowal	1
2	gawel	cis	2
3	Ola	bodo	3

WYŚWIETLIĆ:

k1 wszystkich kierowcow
k2 kierowcow z kategoria B
k3 kierowcow starszych niz 30
k4 kierowcow o nazwisku lis
k5 kierowcow o nazwisku 3literowym
k6 sredni wiek kierowcy
k7 liczbe unikalnych imion kierowcow
k8 nazwisko i wiek kierowcy
k9 nazwiska malymi literami

K10 dane o pojazdach i kierowcach dla kierowcy o id=1'
K11 dane o pojazdach, pasażerach i kierowcach dla pojazdu o id='2'
K13 średni wiek kierowców z kategorią 'B' kierujących pojazdami marki 'vw'

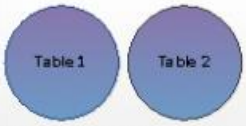
DOKUMENTACJA

https://dev.mysql.com/doc/refman/8.0/en/join.html

https://dev.mysql.com/doc/refman/8.0/en/group-by-modifiers.html

MySQL JOIN Types

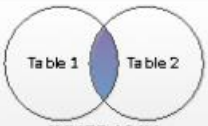
Created by Steve Stedman



SELECT from two tables

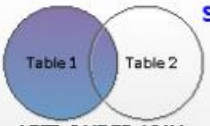
```
SELECT *
  FROM Table1;

SELECT *
  FROM Table2;
```



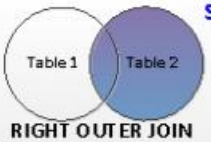
INNER JOIN

```
SELECT *
  FROM Table1 t1
 INNER JOIN Table2 t2
    ON t1.fk = t2.id;
```



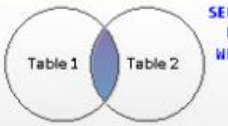
LEFT OUTER JOIN

```
SELECT *
  FROM Table1 t1
 LEFT OUTER JOIN Table2 t2
    ON t1.fk = t2.id;
```



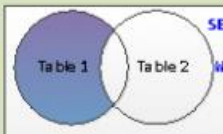
RIGHT OUTER JOIN

```
SELECT *
  FROM Table1 t1
 RIGHT OUTER JOIN Table2 t2
    ON t1.fk = t2.id;
```



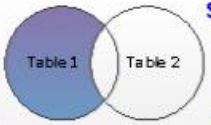
SEMI JOIN – Similar to INNER JOIN, with less duplication.

```
SELECT *
  FROM Table1 t1
 WHERE EXISTS (SELECT 1
                 FROM Table2 t2
                WHERE t1.fk = t2.id
               );
```



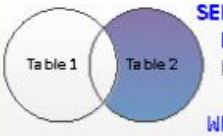
ANTI SEMI JOIN

```
SELECT *
  FROM Table1 t1
 WHERE NOT EXISTS (SELECT 1
                     FROM Table2 t2
                    WHERE t1.fk = t2.id
                   );
```



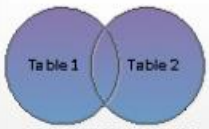
LEFT OUTER JOIN with exclusion

```
SELECT *
  FROM Table1 t1
 LEFT OUTER JOIN Table2 t2
    ON t1.fk = t2.id
 WHERE t2.id is null;
```



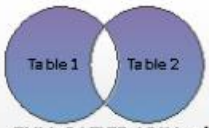
RIGHT OUTER JOIN with exclusion

```
SELECT *
  FROM Table1 t1
 RIGHT OUTER JOIN Table2 t2
    ON t1.fk = t2.id
 WHERE t1.fk is null;
```



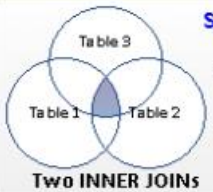
FULL OUTER JOIN

```
SELECT * FROM Table1 t1
  LEFT OUTER JOIN Table2 t2
    ON t1.fk = t2.id
UNION
SELECT * FROM Table1 t1
 RIGHT OUTER JOIN Table2 t2
    ON t1.fk = t2.id;
```



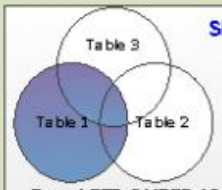
FULL OUTER JOIN with exclusion

```
SELECT * FROM Table1 t1
  LEFT OUTER JOIN Table2 t2
    ON t1.fk = t2.id
 WHERE t2.id IS NOT NULL
UNION
SELECT * FROM Table1 t1
 RIGHT OUTER JOIN Table2 t2
    ON t1.fk = t2.id
 WHERE t1.ID IS NOT NULL;
```



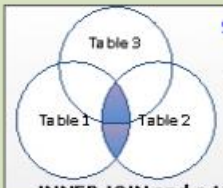
Two INNER JOINs

```
SELECT *
  FROM Table1 t1
 INNER JOIN Table2 t2
    ON t1.fk = t2.id
 INNER JOIN Table3 t3
    ON t1.fk_table3 = t3.id;
```



Two LEFT OUTER JOINS

```
SELECT *
  FROM Table1 t1
 LEFT OUTER JOIN Table2 t2
    ON t1.fk = t2.id
 LEFT OUTER JOIN Table3 t3
    ON t1.fk_table3 = t3.id;
```



INNER JOIN and a LEFT OUTER JOIN

```
SELECT *
  FROM Table1 t1
 INNER JOIN Table2 t2
    ON t1.fk = t2.id
 LEFT OUTER JOIN Table3 t3
    ON t1.fk_table3 = t3.id;
```

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