

SQL fyrirspurnir

| <u>Lýsing</u> | <u>Skipanaform</u> | <u>Dæmi</u> |
|---|--|---|
| Allir dálkar og línur | SELECT * FROM tafla; | SELECT * FROM felagar; |
| Velja línur | SELECT dálk(ar) FROM tafla WHERE skilyrði; | SELECT * from felagar WHERE postnr = '112' |
| Röðun úttaks | SELECT dálk(ar) FROM tafla ORDER BY dálk(ar) [DESC]; | SELECT * FROM felagar ORDER BY stig DESC, inng_ar; |
| Takmarka fjölda lína | SELECT dálk(ar) FROM tafla ORDER BY dálk(ar) LIMIT tala [OFFSET tala]; | SELECT * FROM felagar ORDER BY stig DESC LIMIT 3 OFFSET 3; |
| Reglulegar segðir | SELECT dálk(ar) FROM tafla WHERE dálk LIKE 'reg. segð'; | SELECT * FROM sumarhus WHERE stadur LIKE '%vatn%'; |
| Samsöfnun gagna | SELECT samsöfnun(dálkur) FROM tafla; | SELECT avg(stig) FROM felagar; |
| Hópun gagna | SELECT dálk, samsöfnun(dálk) FROM tafla GROUP BY dálkur; | SELECT postnr, avg(stig) FROM felagar GROUP BY postnr; |
| Velja úr hópa | SELECT dálk, samsöfnun(dálk) FROM tafla GROUP BY dálkur HAVING skilyrði; | SELECT postnr, avg(stig) FROM felagar GROUP BY postnr HAVING count(*) > 1; |
| Tenging | SELECT dálk(ar) FROM tafla1 JOIN tafla2 ON skilyrði; | SELECT nafn, dags FROM felagar f JOIN leigur l ON f.fnr = 1.fnr; |
| Náttúruleg tenging | SELECT dálk(ar) FROM tafla1 NATURAL JOIN tafla2; | SELECT nafn, dags FROM felagar NATURAL JOIN leigur; |
| Undirfyrirspurnir: útkoman er ein tala | SELECT dálk(ar) FROM tafla WHERE dálkur = (fyrirspurn skilar tölu); | <pre>SELECT nafn, stig FROM felagar WHERE stig = (SELECT max(stig) FROM felagar);</pre> |
| Undirfyrirspurnir: útkoman er mengi | SELECT dálk(ar) FROM tafla WHERE dálkur IN (fyrirspurn skilar mengi); | SELECT * FROM sumarhus WHERE husnr NOT IN (SELECT husnr FROM leigur); |
| Vinstri ytri tenging | SELECT dálk(ar) FROM tafla1 LEFT JOIN tafla2 ON skilyrði; | <pre>SELECT nafn, husnr, dags FROM felagar LEFT JOIN leigur ON felagar.fnr = leigur.fnr WHERE postnr < '170';</pre> |
| Mengjaaðgerðir | <pre>fyrirspurn1 {UNION INTERSECT EXCEPT} fyrirspurn2</pre> | SELECT fnr FROM felagar WHERE postnr = '112' UNION SELECT fnr FROM leigur GROUP BY fnr HAVING count(*) > 1; |



Aðrar SQL skipanir

| <u>Lýsing</u> | <u>Skipanaform</u> | <u>Dæmi</u> |
|---------------------|---|---|
| Búa til töflu | CREATE TABLE tafla (dálk1 tag, dálk2 tag,); | CREATE TABLE felagar (fnr INTEGER, nafn CHAR(30), postnr CHAR(3), stig INTEGER, inng_ar INTEGER); |
| Eyða töflu | DROP TABLE [IF EXISTS] tafla; | DROP TABLE felagar; |
| Setja inn gögn | INSERT INTO tafla (dálk1, dálk2,) VALUES (gildi1, gildi2,); | <pre>INSERT INTO felagar (fnr, nafn, postnr, inng_ar) VALUES (99, 'Ari', '600', 2021);</pre> |
| Eyða gögnum | DELETE FROM tafla [WHERE skilyrði]; | DELETE FROM sumarhus WHERE husnr = 1007; |
| Breyta gögnum | UPDATE tafla SET dálk = gildi, [WHERE skilyrði]; | UPDATE felagar SET stig = stig - 10, postnr = '101' WHERE fnr = 45; |
| Búa til sýndartöflu | CREATE VIEW tafla AS fyrirspurn; | CREATE VIEW vip AS SELECT * FROM felagar WHERE stig > 400 AND inng_ar <= 2008; |
| Eyða sýndartöflu | DROP VIEW [IF EXISTS] tafla; | DROP TABLE vip; |