



# Big Data com Hive e Impala

Introdução

# HiveQL

- ◇ Hive Query Language
- ◇ Semelhante a MySQL

```
0: jdbc:hive2://> select * from veiculos;
OK
```

veiculos.idveiculo	veiculos.dataaquisicao	veiculos.ano	veiculos.modelo	veiculos.placa	veiculos.status	veiculos.diaria
1	2019-01-25	2019	Tesla Model S P90D	LWJ2929	Disponivel	1800.0
2	2019-01-04	2019	Volvo XC90 T8 Hybrid	LWJ2930	Disponivel	1600.0
3	2019-01-10	2019	BMW 750i xDrive	LWJ2931	Disponivel	1450.0
4	2019-01-28	2019	Mercedes-Benz S65 AMG Coupe	LWJ2932	Disponivel	1950.0
5	2019-01-12	2019	Infiniti Q50S 3.7 Sedan	LWJ2933	Disponivel	2100.0
6	2019-01-30	2019	Volvo XC90 T8 Hybrid	LWJ2934	Disponivel	1600.0
7	2019-01-06	2019	BMW 750i xDrive	LWJ2935	Disponivel	1450.0
8	2019-01-24	2019	Infiniti Q50S 3.7 Sedan	LWJ2936	Disponivel	2100.0
9	2019-01-27	2019	BMW 750i xDrive	LWJ2937	Disponivel	1450.0
10	2019-01-19	2019	Tesla Model S P90D	LWJ2938	Disponivel	1800.0
11	2019-01-27	2019	Infiniti Q50S 3.7 Sedan	LWJ2939	Disponivel	2100.0
12	2019-01-27	2019	BMW 750i xDrive	LWJ2940	Disponivel	1450.0
13	2019-01-21	2019	Mercedes-Benz S65 AMG Coupe	LWJ2941	Disponivel	1950.0
14	2019-01-10	2019	Infiniti Q50S 3.7 Sedan	LWJ2942	Disponivel	2100.0
15	2019-01-07	2019	Volvo XC90 T8 Hybrid	LWJ2943	Disponivel	1600.0
16	2019-01-25	2019	Volvo XC90 T8 Hybrid	LWJ2944	Disponivel	1600.0
17	2019-01-22	2019	Volvo XC90 T8 Hybrid	LWJ2945	Disponivel	1600.0
18	2019-01-24	2019	BMW 750i xDrive	LWJ2946	Disponivel	1450.0
19	2019-01-16	2019	Mercedes-Benz S65 AMG Coupe	LWJ2947	Disponivel	1950.0
20	2019-01-30	2019	Volvo XC90 T8 Hybrid	LWJ2948	Disponivel	1600.0
21	2019-01-04	2019	Tesla Model S P90D	LWJ2949	Disponivel	1800.0
22	2019-01-23	2019	Infiniti Q50S 3.7 Sedan	LWJ2950	Disponivel	2100.0
23	2019-01-13	2019	BMW 750i xDrive	LWJ2951	Disponivel	1450.0
24	2019-01-05	2019	Volvo XC90 T8 Hybrid	LWJ2952	Disponivel	1600.0
25	2019-01-06	2019	Mercedes-Benz S65 AMG Coupe	LWJ2953	Indisponivel	1950.0
26	2019-01-05	2019	BMW 750i xDrive	LWJ2954	Disponivel	1450.0
27	2019-01-30	2019	Tesla Model S P90D	LWJ2955	Disponivel	1800.0
28	2019-01-28	2019	BMW 750i xDrive	LWJ2956	Disponivel	1450.0
29	2019-01-15	2019	Infiniti Q50S 3.7 Sedan	LWJ2957	Disponivel	2100.0
30	2019-01-12	2019	BMW 750i xDrive	LWJ2958	Disponivel	1450.0

# Select



```
0: jdbc:hive2://> select dataaquisicao, modelo, diaria from veiculos;
OK
```

dataaquisicao	modelo	diaria
2019-01-25	Tesla Model S P90D	1800.0
2019-01-04	Volvo XC90 T8 Hybrid	1600.0
2019-01-10	BMW 750i xDrive	1450.0
2019-01-28	Mercedes-Benz S65 AMG Coupe	1950.0
2019-01-12	Infiniti Q50S 3.7 Sedan	2100.0
2019-01-30	Volvo XC90 T8 Hybrid	1600.0
2019-01-06	BMW 750i xDrive	1450.0
2019-01-24	Infiniti Q50S 3.7 Sedan	2100.0
2019-01-27	BMW 750i xDrive	1450.0
2019-01-19	Tesla Model S P90D	1800.0
2019-01-27	Infiniti Q50S 3.7 Sedan	2100.0
2019-01-27	BMW 750i xDrive	1450.0
2019-01-21	Mercedes-Benz S65 AMG Coupe	1950.0
2019-01-10	Infiniti Q50S 3.7 Sedan	2100.0
2019-01-07	Volvo XC90 T8 Hybrid	1600.0
2019-01-25	Volvo XC90 T8 Hybrid	1600.0
2019-01-22	Volvo XC90 T8 Hybrid	1600.0
2019-01-24	BMW 750i xDrive	1450.0
2019-01-16	Mercedes-Benz S65 AMG Coupe	1950.0
2019-01-30	Volvo XC90 T8 Hybrid	1600.0
2019-01-04	Tesla Model S P90D	1800.0
2019-01-23	Infiniti Q50S 3.7 Sedan	2100.0
2019-01-13	BMW 750i xDrive	1450.0
2019-01-05	Volvo XC90 T8 Hybrid	1600.0
2019-01-06	Mercedes-Benz S65 AMG Coupe	1950.0
2019-01-05	BMW 750i xDrive	1450.0
2019-01-30	Tesla Model S P90D	1800.0
2019-01-28	BMW 750i xDrive	1450.0
2019-01-15	Infiniti Q50S 3.7 Sedan	2100.0
2019-01-12	BMW 750i xDrive	1450.0

# Especificando Colunas





# Valores Únicos

```
0: jdbc:hive2://> select distinct modelo from veiculos;
```

modelo
BMW 750i xDrive
Infiniti Q50S 3.7 Sedan
Mercedes-Benz S65 AMG Coupe
Tesla Model S P90D
Volvo XC90 T8 Hybrid



# Condição

```
0: jdbc:hive2://> select * from veiculos where status <> "Disponivel";  
OK
```

veiculos.idveiculo	veiculos.dataaquisicao	veiculos.ano	veiculos.modelo	veiculos.placa	veiculos.status	veiculos.diaria
25	2019-01-06	2019	Mercedes-Benz S65 AMG Coupe	LWJ2953	Indisponivel	1950.0

1 row selected (0.215 seconds)



# Duas Condições

```
0: jdbc:hive2://> select * from veiculos where status = "Disponivel" and diaria >= 1600;  
OK
```

veiculos.idveiculo	veiculos.dataaquisicao	veiculos.ano	veiculos.modelo	veiculos.placa	veiculos.status	veiculos.diaria
1	2019-01-25	2019	Tesla Model S P90D	LWJ2929	Disponivel	1800.0
2	2019-01-04	2019	Volvo XC90 T8 Hybrid	LWJ2930	Disponivel	1600.0
4	2019-01-28	2019	Mercedes-Benz S65 AMG Coupe	LWJ2932	Disponivel	1950.0
5	2019-01-12	2019	Infiniti Q50S 3.7 Sedan	LWJ2933	Disponivel	2100.0
6	2019-01-30	2019	Volvo XC90 T8 Hybrid	LWJ2934	Disponivel	1600.0
8	2019-01-24	2019	Infiniti Q50S 3.7 Sedan	LWJ2936	Disponivel	2100.0
10	2019-01-19	2019	Tesla Model S P90D	LWJ2938	Disponivel	1800.0
11	2019-01-27	2019	Infiniti Q50S 3.7 Sedan	LWJ2939	Disponivel	2100.0
13	2019-01-21	2019	Mercedes-Benz S65 AMG Coupe	LWJ2941	Disponivel	1950.0
14	2019-01-10	2019	Infiniti Q50S 3.7 Sedan	LWJ2942	Disponivel	2100.0
15	2019-01-07	2019	Volvo XC90 T8 Hybrid	LWJ2943	Disponivel	1600.0
16	2019-01-25	2019	Volvo XC90 T8 Hybrid	LWJ2944	Disponivel	1600.0
17	2019-01-22	2019	Volvo XC90 T8 Hybrid	LWJ2945	Disponivel	1600.0
19	2019-01-16	2019	Mercedes-Benz S65 AMG Coupe	LWJ2947	Disponivel	1950.0
20	2019-01-30	2019	Volvo XC90 T8 Hybrid	LWJ2948	Disponivel	1600.0
21	2019-01-04	2019	Tesla Model S P90D	LWJ2949	Disponivel	1800.0
22	2019-01-23	2019	Infiniti Q50S 3.7 Sedan	LWJ2950	Disponivel	2100.0
24	2019-01-05	2019	Volvo XC90 T8 Hybrid	LWJ2952	Disponivel	1600.0
27	2019-01-30	2019	Tesla Model S P90D	LWJ2955	Disponivel	1800.0
29	2019-01-15	2019	Infiniti Q50S 3.7 Sedan	LWJ2957	Disponivel	2100.0



# Condição OR

```
0: jdbc:hive2://> select * from veiculos where modelo <> "Infiniti Q50S 3.7 Sedan" or diaria < 2000;
OK
```

veiculos.idveiculo	veiculos.dataaquisicao	veiculos.ano	veiculos.modelo	veiculos.placa	veiculos.status	veiculos.diaria
1	2019-01-25	2019	Tesla Model S P90D	LWJ2929	Disponivel	1800.0
2	2019-01-04	2019	Volvo XC90 T8 Hybrid	LWJ2930	Disponivel	1600.0
3	2019-01-10	2019	BMW 750i xDrive	LWJ2931	Disponivel	1450.0
4	2019-01-28	2019	Mercedes-Benz S65 AMG Coupe	LWJ2932	Disponivel	1950.0
6	2019-01-30	2019	Volvo XC90 T8 Hybrid	LWJ2934	Disponivel	1600.0
7	2019-01-06	2019	BMW 750i xDrive	LWJ2935	Disponivel	1450.0
9	2019-01-27	2019	BMW 750i xDrive	LWJ2937	Disponivel	1450.0
10	2019-01-19	2019	Tesla Model S P90D	LWJ2938	Disponivel	1800.0
12	2019-01-27	2019	BMW 750i xDrive	LWJ2940	Disponivel	1450.0
13	2019-01-21	2019	Mercedes-Benz S65 AMG Coupe	LWJ2941	Disponivel	1950.0
15	2019-01-07	2019	Volvo XC90 T8 Hybrid	LWJ2943	Disponivel	1600.0
16	2019-01-25	2019	Volvo XC90 T8 Hybrid	LWJ2944	Disponivel	1600.0
17	2019-01-22	2019	Volvo XC90 T8 Hybrid	LWJ2945	Disponivel	1600.0
18	2019-01-24	2019	BMW 750i xDrive	LWJ2946	Disponivel	1450.0
19	2019-01-16	2019	Mercedes-Benz S65 AMG Coupe	LWJ2947	Disponivel	1950.0
20	2019-01-30	2019	Volvo XC90 T8 Hybrid	LWJ2948	Disponivel	1600.0
21	2019-01-04	2019	Tesla Model S P90D	LWJ2949	Disponivel	1800.0
23	2019-01-13	2019	BMW 750i xDrive	LWJ2951	Disponivel	1450.0
24	2019-01-05	2019	Volvo XC90 T8 Hybrid	LWJ2952	Disponivel	1600.0
25	2019-01-06	2019	Mercedes-Benz S65 AMG Coupe	LWJ2953	Indisponivel	1950.0
26	2019-01-05	2019	BMW 750i xDrive	LWJ2954	Disponivel	1450.0
27	2019-01-30	2019	Tesla Model S P90D	LWJ2955	Disponivel	1800.0
28	2019-01-28	2019	BMW 750i xDrive	LWJ2956	Disponivel	1450.0
30	2019-01-12	2019	BMW 750i xDrive	LWJ2958	Disponivel	1450.0

