

SQL for Data Analysis

QUERY 1 : SQL query to find the first 10 rows of the database .

```
SELECT * FROM bitcoin
```

```
LIMIT 10;
```

RESULT 1 :

	Date	Open	High	Low	Close	Volume	Currency
►	2010-07-18	0	0.1	0.1	0.1	75	USD
	2010-07-19	0.1	0.1	0.1	0.1	574	USD
	2010-07-20	0.1	0.1	0.1	0.1	262	USD
	2010-07-21	0.1	0.1	0.1	0.1	575	USD
	2010-07-22	0.1	0.1	0.1	0.1	2160	USD
	2010-07-23	0.1	0.1	0.1	0.1	2403	USD
	2010-07-24	0.1	0.1	0.1	0.1	496	USD
	2010-07-25	0.1	0.1	0.1	0.1	1551	USD
	2010-07-26	0.1	0.1	0.1	0.1	877	USD
	2010-07-27	0.1	0.1	0.1	0.1	3374	USD

QUERY 2 : Query to Get All Records from a Specific Year (e.g., 2020)

```
SELECT * FROM bitcoin
```

```
WHERE YEAR(Date) = 2020;
```

RESULT 2 :

	Date	Open	High	Low	Close	Volume	Currency
►	2020-01-01	7196.4	7259.4	7180	7199.8	420278	USD
	2020-01-02	7199.7	7209.6	6901.4	6967	632778	USD
	2020-01-03	6967.1	7402.9	6884.1	7343.1	936288	USD
	2020-01-04	7345.1	7433.1	7291.4	7376.8	523909	USD
	2020-01-05	7376.8	7501	7345.6	7372.5	628142	USD
	2020-01-06	7372.6	7783.1	7366.7	7759.1	786750	USD
	2020-01-07	7759.1	8182	7754.1	8155.7	1013985	USD
	2020-01-08	8154.2	8436.4	7900.8	8059.6	1188887	USD
	2020-01-09	8060	8065.9	7779.2	7842.4	786500	USD
	2020-01-10	7842.5	8187.4	7697.7	8187.1	1049642	USD
	2020-01-11	8187.8	8262.9	8008.4	8024.1	776750	USD

QUERY 3 : SQL query for Average Closing Price

```
SELECT AVG(Close) AS avg_closing_price
```

```
FROM bitcoin;
```

RESULT 3 :

avg_closing_price
8235.594988662137

QUERY 4 : SQL query for Highest Price Ever

SELECT MAX(High) AS highest_price

FROM bitcoin;

RESULT 4 :

highest_price
68990.6

QUERY 5 : SQL query for Lowest Closing Price in USD

SELECT MIN(Close) AS lowest_closing_price

FROM bitcoin

WHERE Currency = 'USD';

RESULT 5 :

lowest_closing_price
0.1

QUERY 6 : SQL query for Total Volume Traded

SELECT SUM(Volume) AS total_volume

FROM bitcoin;

RESULT 6:

total_volume
31428229739

QUERY 7 : SQL query for Days Where Price Went Up (Close > Open)

SELECT Date, Open, Close

FROM bitcoin

WHERE Close > Open

ORDER BY Date;

RESULT 7 :

	Date	Open	Close
▶	2010-07-18	0	0.1
	2010-10-26	0.1	0.2
	2010-11-05	0.2	0.3
	2010-11-06	0.3	0.4
	2010-11-12	0.2	0.3
	2010-11-18	0.2	0.3
	2010-12-02	0.2	0.3
	2010-12-16	0.2	0.3
	2010-12-20	0.2	0.3
	2010-12-22	0.2	0.3
	2010-12-26	0.2	0.3

QUES 8 : SQL query for Group by Year and Get Average Close

SELECT Date, Open, Close

FROM bitcoin

WHERE Close > Open

ORDER BY Date;

RESULT 8 :

	Year	Avg_Close
▶	2010	0.16
	2011	5.64
	2012	8.29
	2013	200.15
	2014	522.89
	2015	272.02
	2016	567
	2017	3981.07
	2018	7552.16
	2019	7371.82
	2020	11111.63