Launch Site Names

Query: SELECT DISTINCT Launch_Site FROM SPACEXTABLE;

Launch_Site
CCAFS LC-40
VAFB SLC-4E
KSC LC-39A
CCAFS SLC-40

This selects every unique launch site name from the table.

Launch Site Names Beginning With 'CCA'

```
Query: SELECT * FROM SPACEXTABLE
    WHERE Launch_Site LIKE 'CC%'
    LIMIT 5;
```

Date	Time (UTC)	Booster_Version	Launch_Site	Payload	PAYLOAD_MASS__KG_	Orbit	Customer	Mission_Outcome	Landing_Outcome
2010-06-04	18:45:00	F9 v1.0 B0003	CCAFS LC-40	Dragon Spacecraft Qualification Unit	0	LEO	SpaceX	Success	Failure (parachute)
2010-12-08	15:43:00	F9 v1.0 B0004	CCAFS LC-40	Dragon demo flight C1, two CubeSats, barrel of Brouere cheese	0	LEO (ISS)	NASA (COTS) NRO	Success	Failure (parachute)
2012-05-22	7:44:00	F9 v1.0 B0005	CCAFS LC-40	Dragon demo flight C2	525	LEO (ISS)	NASA (COTS)	Success	No attempt
2012-10-08	0:35:00	F9 v1.0 B0006	CCAFS LC-40	SpaceX CRS-1	500	LEO (ISS)	NASA (CRS)	Success	No attempt
2013-03-01	15:10:00	F9 v1.0 B0007	CCAFS LC-40	SpaceX CRS-2	677	LEO (ISS)	NASA (CRS)	Success	No attempt

This selects 5 sites whose launch site's name begins with 'CCA'

Total Payload Mass From NASA

```
Query: SELECT SUM(PAYLOAD_MASS__KG_)
    FROM SPACEXTABLE
    WHERE CUSTOMER = 'NASA (CRS)';
```

SUM(PAYLOAD_MASS__KG_)
45596

This selects the sum of all payload masses from launches by NASA

Average Payload Mass of F9 v1.1 Booster

```
Query: SELECT AVG(PAYLOAD_MASS__KG_)
    FROM SPACEXTABLE
    WHERE Booster_Version = 'F9 v1.1';
```

AVG(PAYLOAD_MASS__KG_)
2928.4

This selects the average mass from every payload carried by the F9 v1.1 Booster.

First Successful Ground Landing Date

```
Query: SELECT MIN(Date) FROM SPACEXTABLE
    WHERE Landing_Outcome = 'Success (drone ship)';
```

MIN(Date)
2016-04-08

This selects the lowest (earliest) date of a successful ground landing.

Successful Drone Ship Landings With Mass Between 4000-6000 kg

```
Query: SELECT Booster_Version FROM SPACEXTABLE
    WHERE PAYLOAD_MASS__KG_ > 4000
    AND PAYLOAD_MASS__KG_ < 6000
    AND LANDING_OUTCOME = 'Success (drone ship)';
```

Booster_Version
F9 FT B1022
F9 FT B1026
F9 FT B1021.2
F9 FT B1031.2

This selects every booster version that has had a successful drone ship landing while carrying a mass between 4000 and 6000 kg.

Total Successful and Failed Missions

Query:

```
SELECT COUNT(Mission_Outcome) FROM SPACEXTABLE
    WHERE Mission_Outcome = 'Success';
SELECT COUNT(Mission_Outcome) FROM SPACEXTABLE
    WHERE Mission_Outcome != 'Success';
```

COUNT(Mission_Outcome)
98

COUNT(Mission_Outcome)
3

The left output is the total number of successful missions.
The right output is the total number of failed missions.

Boosters Which Carried the Max Payload

```
Query: SELECT Booster_Version FROM SPACEXTABLE
    WHERE PAYLOAD_MASS__KG_ = (SELECT MAX(PAYLOAD_MASS__KG_)
    FROM SPACEXTABLE);
```

Booster_Version
F9 B5 B1048.4
F9 B5 B1049.4
F9 B5 B1051.3
F9 B5 B1056.4
F9 B5 B1048.5
F9 B5 B1051.4
F9 B5 B1049.5
F9 B5 B1060.2
F9 B5 B1058.3
F9 B5 B1051.6
F9 B5 B1060.3
F9 B5 B1049.7

This selects every booster which has carried a payload with mass equal to the maximum.

2015 Launch Records

```
Query: SELECT substr(Date, 6,2), Landing_Outcome, Booster_Version,
Launch_Site FROM SPACEXTABLE
    WHERE substr(Date,0,5)='2015'
    GROUP BY substr(Date, 6,2);
```

substr(Date, 6,2)	Landing_Outcome	Booster_Version	Launch_Site
01	Failure (drone ship)	F9 v1.1 B1012	CCAFS LC-40
02	Controlled (ocean)	F9 v1.1 B1013	CCAFS LC-40
03	No attempt	F9 v1.1 B1014	CCAFS LC-40
04	Failure (drone ship)	F9 v1.1 B1015	CCAFS LC-40
06	Precluded (drone ship)	F9 v1.1 B1018	CCAFS LC-40
12	Success (ground pad)	F9 FT B1019	CCAFS LC-40

This counts the number of failures by type in the year 2015.

Ranking Outcomes Between 2010-06-04 and 2017-03-20

```
Query: SELECT Landing_Outcome, COUNT(Landing_Outcome) FROM SPACEXTABLE
    WHERE DATE >= '2010-06-04'    AND DATE <= '2017-03-20'
    GROUP BY Landing_Outcome
    ORDER BY COUNT(Landing_Outcome) DESC;
```

Landing_Outcome	COUNT(Landing_Outcome)
No attempt	10
Success (drone ship)	5
Failure (drone ship)	5
Success (ground pad)	3
Controlled (ocean)	3
Uncontrolled (ocean)	2
Failure (parachute)	2
Precluded (drone ship)	1

This counts the number of landing types, and sorts them by frequency.