```
1  import pandas as pd
2  import numpy as np
3  import seaborn as sns
4  import matplotlib.pyplot as plt
5  sns.set_style('whitegrid')
6  %matplotlib inline
```

```
1  df = pd.read_csv("/content/drive/MyDrive/Colab Notebooks/Dataset/Space X.csv")
2  df.head()
```

	Flight Number	Launch Date	Launch Time	Launch Site	Vehicle Type	Payload Name	Payload Type	Payload Mass (kg)	Pay C
0	F1-1	24 March 2006	22:30	Marshall Islands	Falcon 1	FalconSAT-2	Research Satellite	19.5	
1	F1-2	21 March 2007	01:10	Marshall Islands	Falcon 1	DemoSat	NaN	NaN	
2	F1-3	3 August 2008	03:34	Marshall Islands	Falcon 1	Trailblazer	Communication Satellite	NaN	
3	F1-3	3 August 2008	03:34	Marshall Islands	Falcon 1	PRESat, NanoSail-D	Research Satellites	8.0	
4	F1-3	3 August 2008	03:34	Marshall Islands	Falcon 1	Explorers	Human Remains	NaN	

```
1 df.shape
```

```
(41, 16)
```

```
1 df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 41 entries, 0 to 40
Data columns (total 16 columns):
 #   Column             Non-Null Count  Dtype
---  ------             --------------  -----
 0   Flight Number      41 non-null     object
 1   Launch Date        41 non-null     object
 2   Launch Time        41 non-null     object
 3   Launch Site        41 non-null     object
 4   Vehicle Type       41 non-null     object
 5   Payload Name       41 non-null     object
 6   Payload Type       38 non-null     object
 7   Payload Mass (kg)  33 non-null     float64
 8   Payload Orbit      36 non-null     object
 9   Customer Name      39 non-null     object
 10  Customer Type      39 non-null     object
 11  Customer Country   39 non-null     object
 12  Mission Outcome    41 non-null     object
 13  Failure Reason     8 non-null      object
 14  Landing Type       28 non-null     object
 15  Landing Outcome    21 non-null     object
dtypes: float64(1), object(15)
memory usage: 5.2+ KB
```

```
1 df.dtypes
```

```
Flight Number       object
Launch Date         object
Launch Time         object
Launch Site         object
Vehicle Type        object
Payload Name        object
Payload Type        object
Payload Mass (kg)   float64
Payload Orbit       object
Customer Name       object
Customer Type       object
Customer Country    object
Mission Outcome     object
Failure Reason      object
Landing Type        object
```

```
       Landing Outcome         object
       dtype: object
```

```
1 # Description of data
2 df.describe()
```

	Payload Mass (kg)
count	33.000000
mean	2739.772727
std	2131.502973
min	8.000000
25%	570.000000
50%	2490.000000
75%	4159.000000
max	9600.000000

```
1  plt.figure(figsize=(18,6))
2  sns.heatmap(df.isnull(), cbar=False, cmap='viridis', yticklabels=False)
3  plt.title('Missing Values')
```

Text(0.5, 1.0, 'Missing Values')