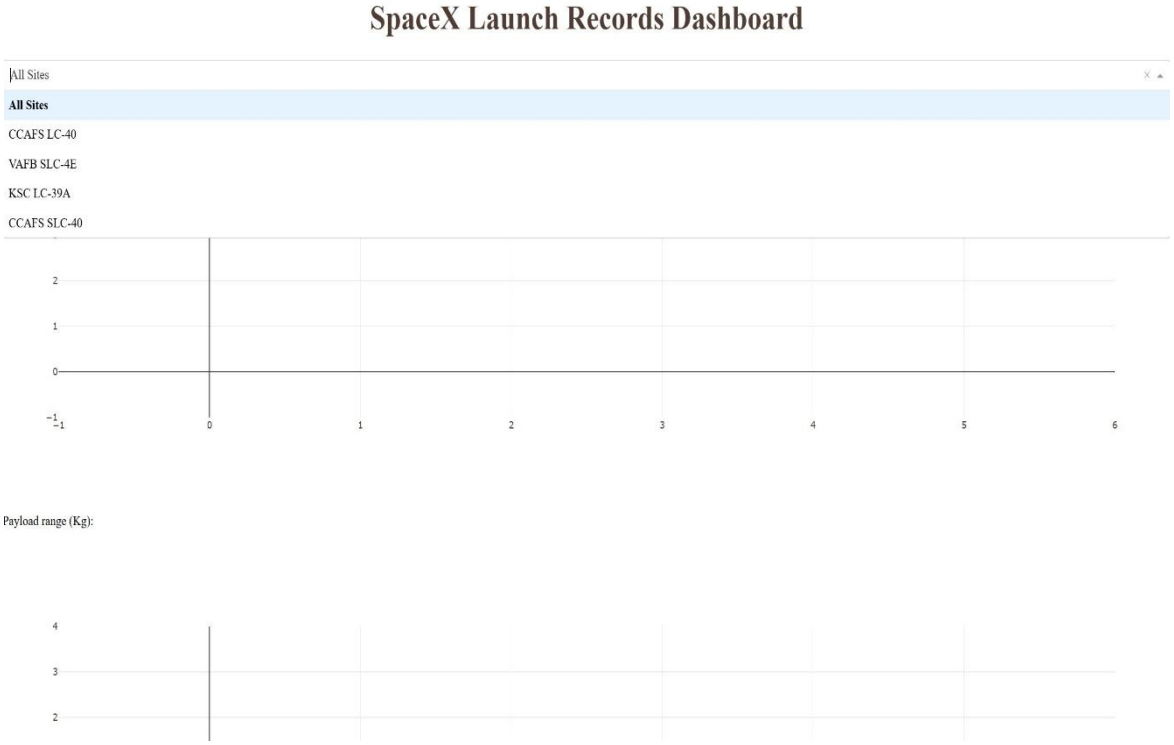
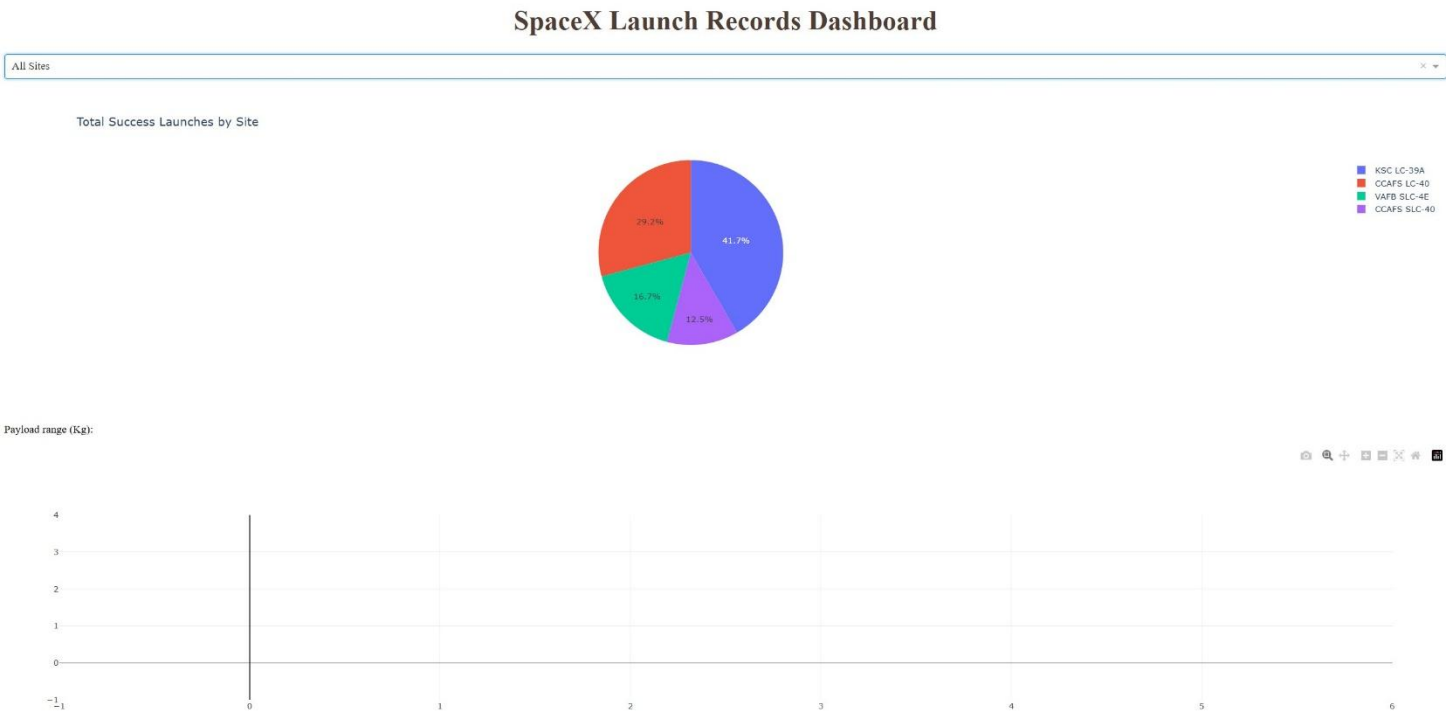
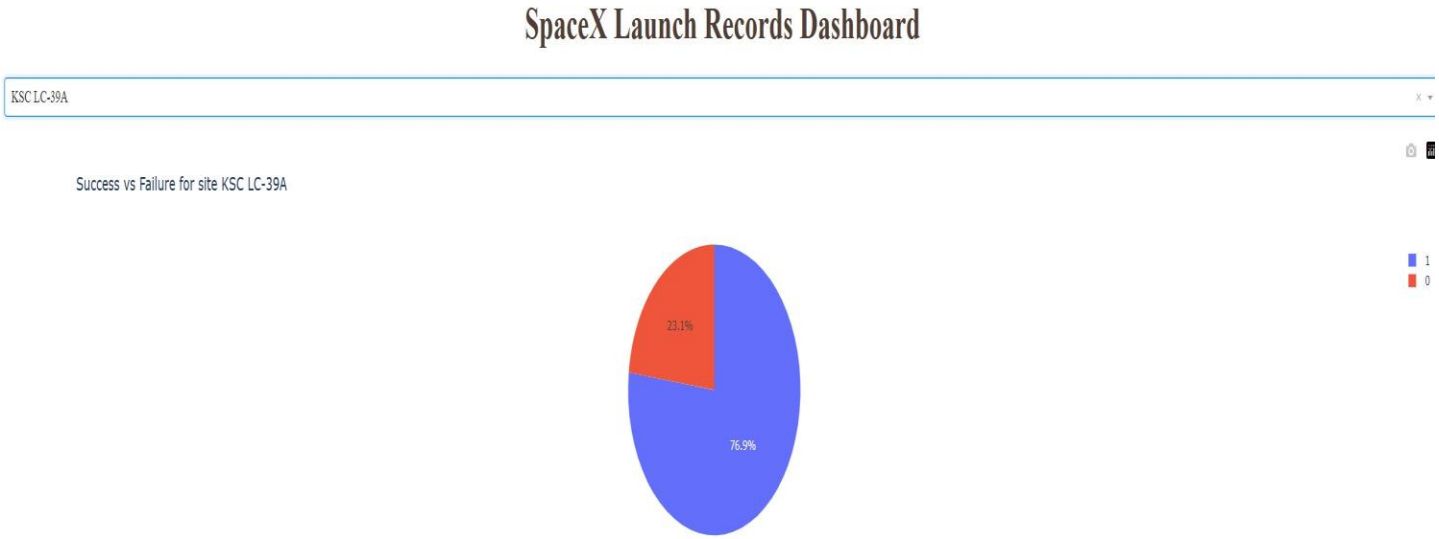
## TASK 1

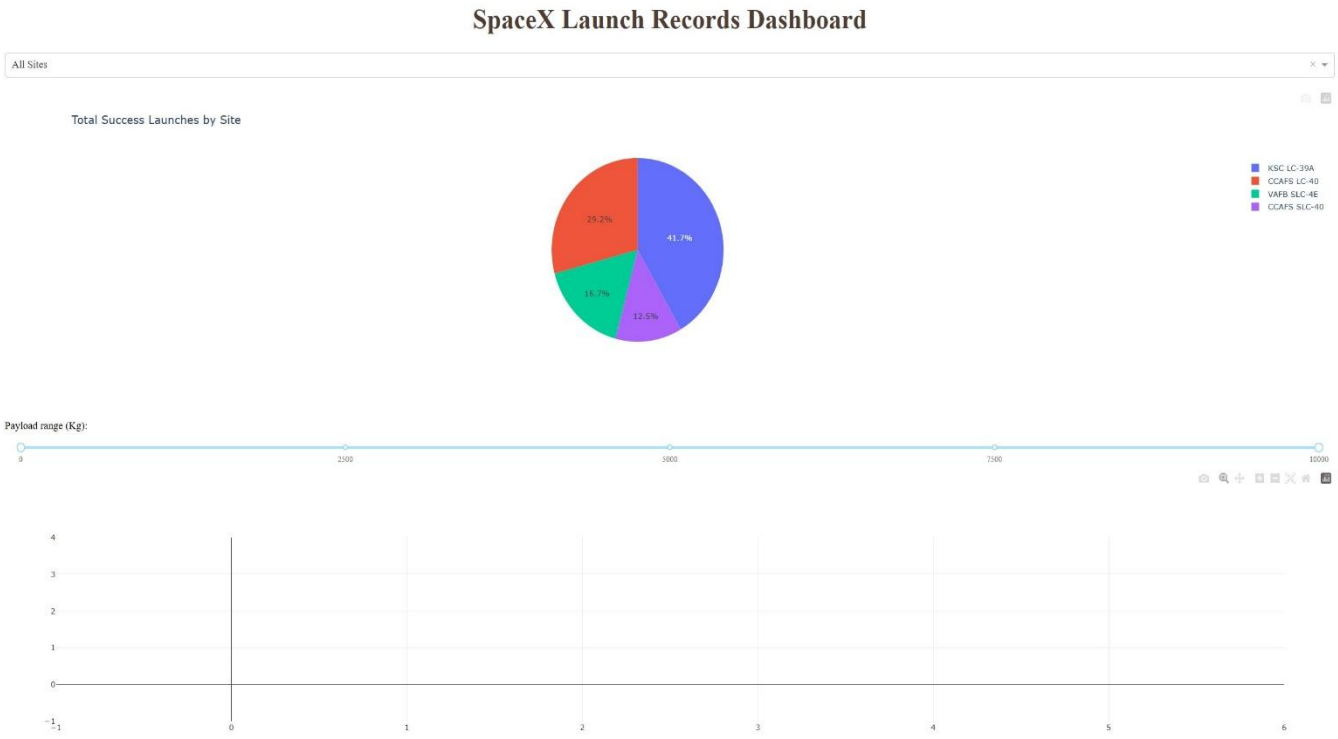

SpaceX Launch Records Dashboard
All Sites
All Sites
CCAFS LC-40
VAFB SLC-4E
KSC LC-39A
CCAFS SLC-40
Payload range (Kg):

## TASK 2

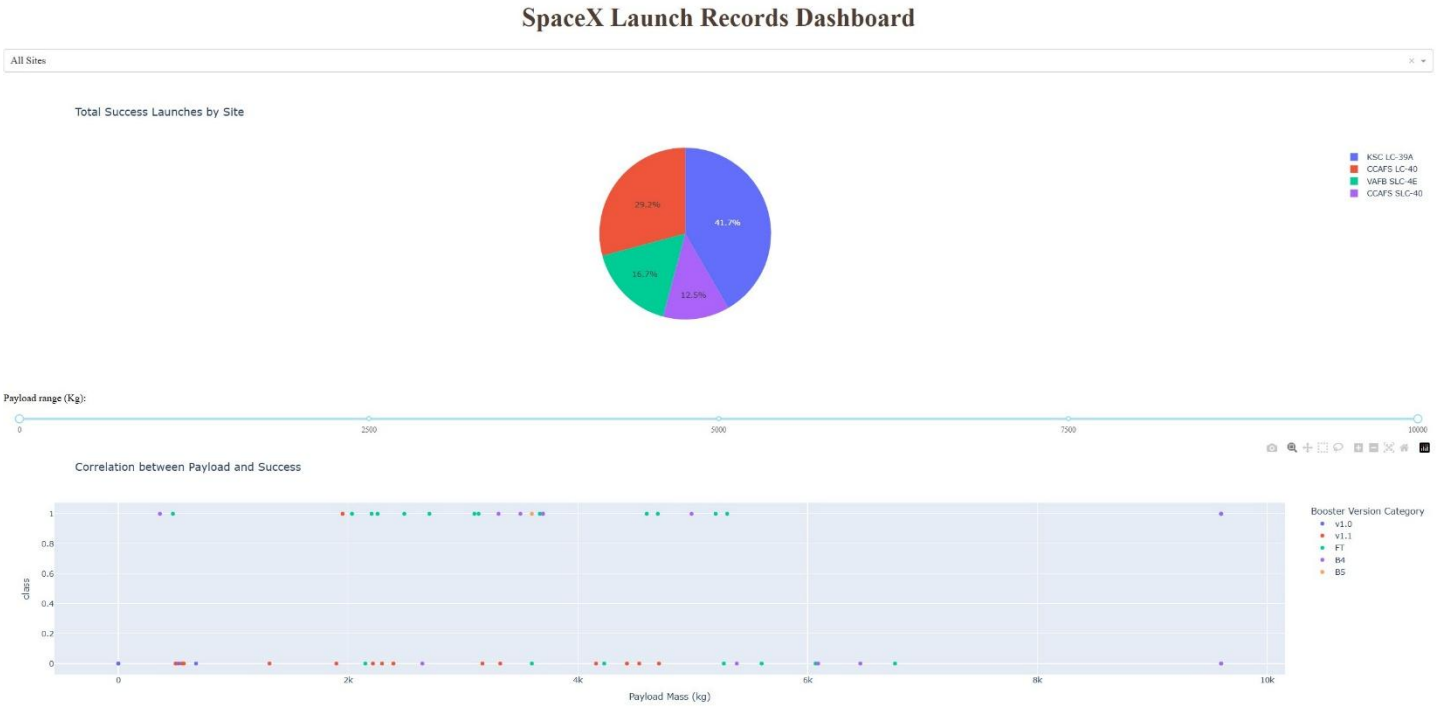

SpaceX Launch Records Dashboard
All Sites
Total Success Launches by Site
KSC LC-39A
CCAFS LC-40
VAFB SLC-4E
CCAFS SLC-40
41.7%
29.2%
16.7%
12.5%
Payload range (Kg):


SpaceX Launch Records Dashboard
KSC LC-39A
Success vs Failure for site KSC LC-39A
23.1%
76.9%
1
0

## TASK 3


SpaceX Launch Records Dashboard
All Sites
Total Success Launches by Site
29.2%
41.7%
16.7%
12.5%
KSC LC-39A
CCAFS LC-40
VAFB SLC-4E
CCAFS SLC-40
Payload range (Kg):
0
2500
5000
7500
10000

## TASK 4




### 1. Which launch site has the highest number of successful launches?

→ **KSC LC-39A**

In the pie chart (ALL Sites), this site represents the largest share.
It is therefore the site with the highest number of successful launches.

### 2. Which launch site has the highest success rate?

General observations from the dataset:

- **KSC LC-39A** → mostly successful launches
- **VAFB SLC-4E** → some failures, but overall a good success rate
- **CCAFS LC-40** → solid performance
- **CCAFS SLC-40** → slightly lower success rate

**Conclusion:**
→ **KSC LC-39A has the highest success rate.**

It shows almost only **class = 1 (success)** in most configurations (Task 2 pie chart).

### 3. Which payload range has the highest success rate?

Using the slider and the scatter plot:

Visual observation:

Payloads between **2000 kg and 6000 kg** show a high concentration of **class = 1** points (successful launches).
There are few or no failures in this range.

**Conclusion:**
→ The payload range with the highest success rate is **~2000 kg to ~6000 kg**.

### 4. Which payload range has the lowest success rate?

Observation:

- Several failures appear in the **low-payload region (< 2000 kg)**
- Some failures also occur around **5000–6000 kg**, but they are fewer

**Conclusion:**
→ The payload range **below 2000 kg** has the lowest success rate.

### 5. Which F9 Booster version has the highest success rate?

In the scatter plot, colors represent the different booster versions:

- **FT (Falcon 9 Full Thrust)**
- **v1.0**
- **v1.1**
- **B4**
- **B5**

Observation :

- FT points are overwhelmingly **class = 1** (success)
- Older versions (v1.0, v1.1) show more failures
- B5 also has many successes, but fewer data points than FT

**Conclusion:**
→ The **FT (Falcon 9 Full Thrust)** version has the highest success rate.