# THIS IS A PRESENTATION FROM MY FINDING ON THE FLIGHT DATA

## FROM THE BUSINESS PROBLEM I HAVE COME UP WITH SOME OBJECTIVE:

- From the data set (flight)which engine has the lowest fatality rate?
- From the data set(flight) some planes are built professionally, and others are built by amateurs (some number of people) which of the two have lower risk in terms of safety(fatality)?
- On what weather conditions is the fatality rate the highest?

### External relevance

- I had to check out some flight terms from the relevant flight website for example:
- Amateur built which means Aircraft of which at least 51 % is built by an amateur or a non-profit making association of amateurs, for their purposes and without any commercial objective
- Far description- A set of rules created by the FAA (Federal Aviation Administration)

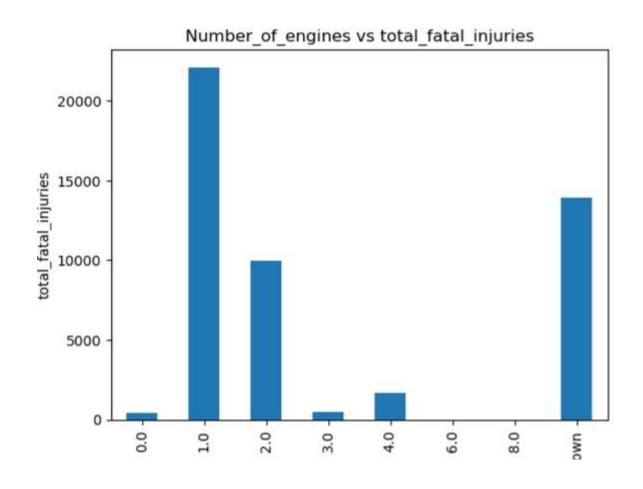
### DATA UNDERSTANDING

- Here I was able to go through my dataset and identify some missing values
- For numerical variables I was able to fill them with the median because they didn't show a normal distribution i.e they were skewed to the right
- Others I was able to fill them with unknown for neutral placeholder
- There were also outliers. These are values that are far away from others for example you have a dataset (2,3,4,100). Then 100 becomes our outliers and it must be removed using inter quantile range

### DATA ANALYSIS

- Here I was able to fill in null values
- For numerical variables I was able to fill them with the median because they didn't show a normal distribution i.e they were skewed to the right
- Others I was able to fill them with unknown for neutral placeholder
- There were also outliers. These are values that are far away from others for example you have a dataset (2,3,4,100). Then 100 becomes our outliers and it must be removed using the quantile range

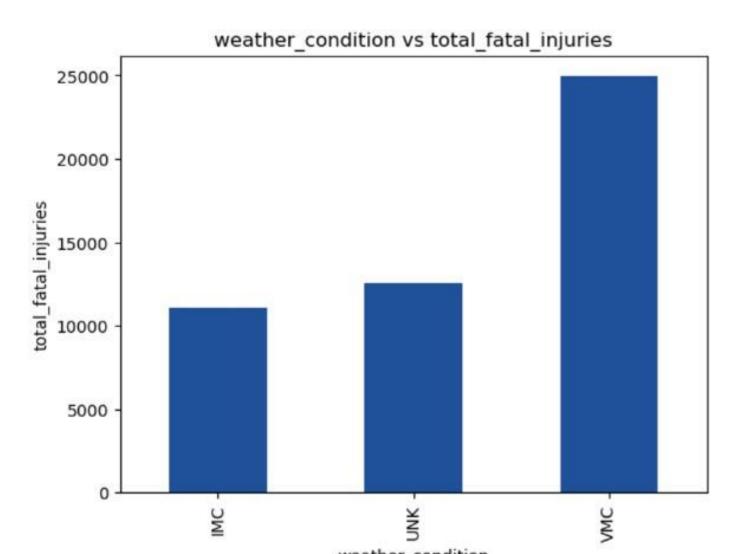
# Visualization1: Number of engine vs the total fatality



### **OBSERVATIONS**

 From the visualization above we can see that the if an aircraft has one engine the rate of fatality is high as compared to when the number of engines is six and eight

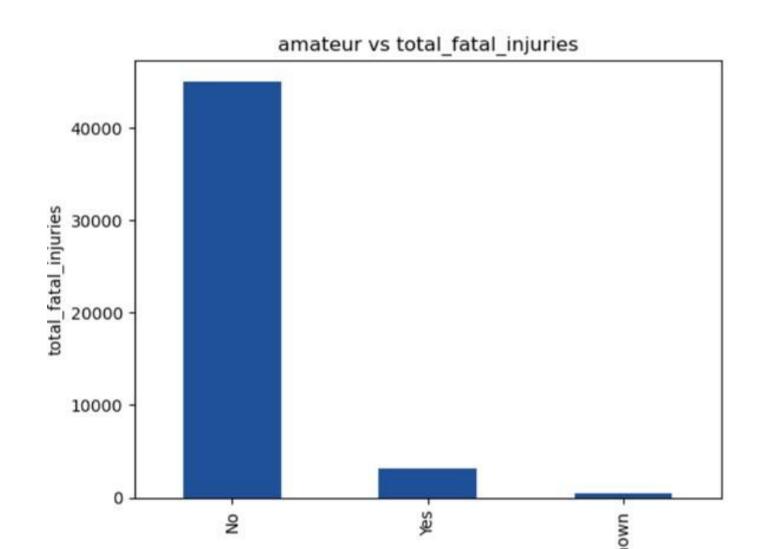
# Visualization2:Weather\_conditions vs the total fatality



### **OBSERVATION**

• From the above visualization, we can see that when the weather condition is IMC,(IMC typically involves poor visibility, low clouds, fog, heavy rain, or other obstructions to vision) there are fewer fatal injuries as compared to when the condition is VMC(Weather conditions that allow pilots to operate the aircraft using visual references outside the cockpit (e.g., the horizon, terrain, or other aircraft))

### VISUALIZATION3:Total\_fatal\_injuries vs Amateur



### **OBSERVATIONS**

 We can see the plane is built by an amateur tend to have less damage to the people than the commercial one

### RECOMMENDATION

- The following are the recommendations from the above visualization:
- Investing in aircraft with more than two engines i.e three and four engines tend to have a lower fatal rate than one engine
- When flying the pilot should use the IMC whether conditions rather than the UNK
- Ensure that the planes are amateur-built rather than professionally manufactured aircraft

### **END**

### **THANK YOU**