



Case study

An analysis on Innoson Motors

[Link](#) to notebook.

Problem Statement:

**Analyse data on
Innoson Vehicle
Motors**



The problem

- What is the Innoson vehicle price range?
- What is the average price of an IVM car?
- Which vehicle is the most expensive?
- Which vehicle is the least expensive?



What is the Innoson vehicle price range?

The price range of an Innoson Vehicle ranges from ₦3.52 million to ₦27.825 million.

| | Name ▾ | Price range ▾ |
|----|-----------------------------------|-----------------------|
| 1 | Innoson FOX | ₦3.52 - ₦3.85 million |
| 2 | Innoson UMU | ₦3.63 - ₦3.96 million |
| 3 | Innoson G5 | ₦6.38 - ₦6.82 million |
| 4 | Innoson G6 | ₦6.6 - ₦7million |
| 5 | Innoson G80 (aka Innoson G Wagon) | ₦27,825,000 |
| 6 | Innoson G40 | ₦17,325,000 |
| 7 | Innoson Carrier 4×4 | ₦6.49 million |
| 8 | Innoson Carrier 4×2 | ₦6.05 million |
| 9 | Innoson 5000 | ₦5.28 - ₦6.93million |
| 10 | Innoson 6601 | ₦11.44 million |
| 11 | Innoson 6857 | ₦24.2 million |
| 12 | Innoson 6800 | ₦13.31 million |



What is the average price of an IVM car?

```
# The average car price
```

```
[56]
```

```
print("The average cost of purchasing an IVM car is approxiamtely ", int(data["Average price"].mean()), "  
million Naira.")
```

```
The average cost of purchasing an IVM car is approxiamtely 11 million Naira.
```

The average cost of purchasing an IVM car is approximately 11 million Naira.



Which vehicle is the most expensive?

```
# The most expensive vehicle
```

```
print("The most expensive Innoson vehicle is ", data[data["Average price"] == data["Average price"].max()]  
["Name"][0], " which costs ", data["Average price"].max(), " million Naira.")
```

```
The most expensive Innoson vehicle is Innoson G80 (aka Innoson G Wagon) which costs 27.825 million Naira.
```

The most expensive Innoson vehicle is Innoson G80 (aka Innoson G Wagon) which costs 27.825 million Naira.



Which vehicle is the most expensive?

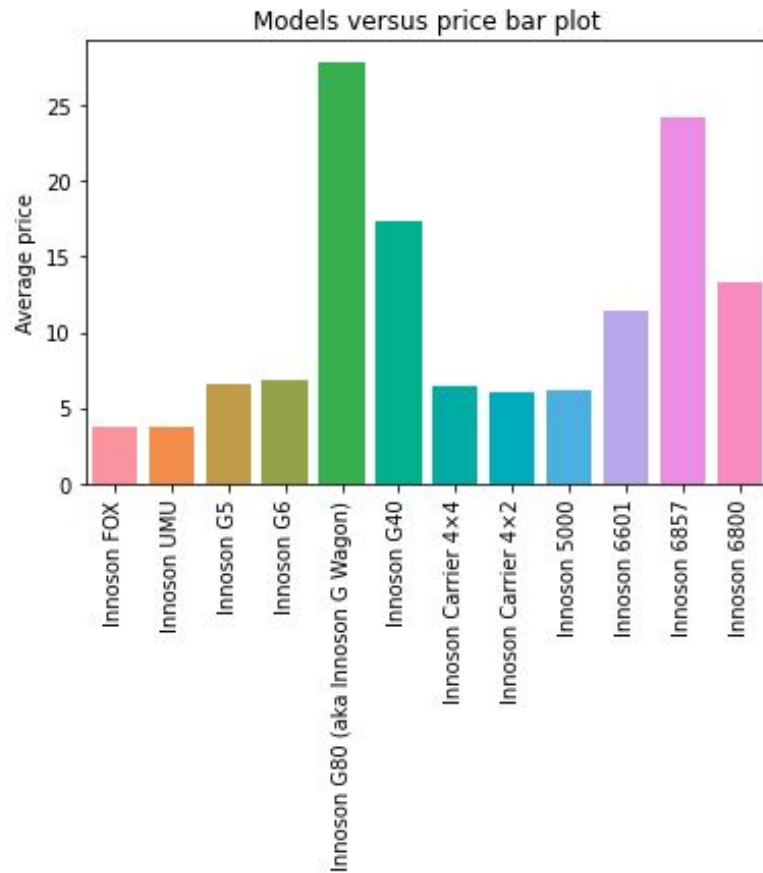
```
# The least expensive vehicle
```

```
print("The least expensive Innoson vehicle is ", data[data["Average price"] == data["Average price"].min()]\n      ["Name"][0], " which costs ", data["Average price"].min(), " million Naira.")
```

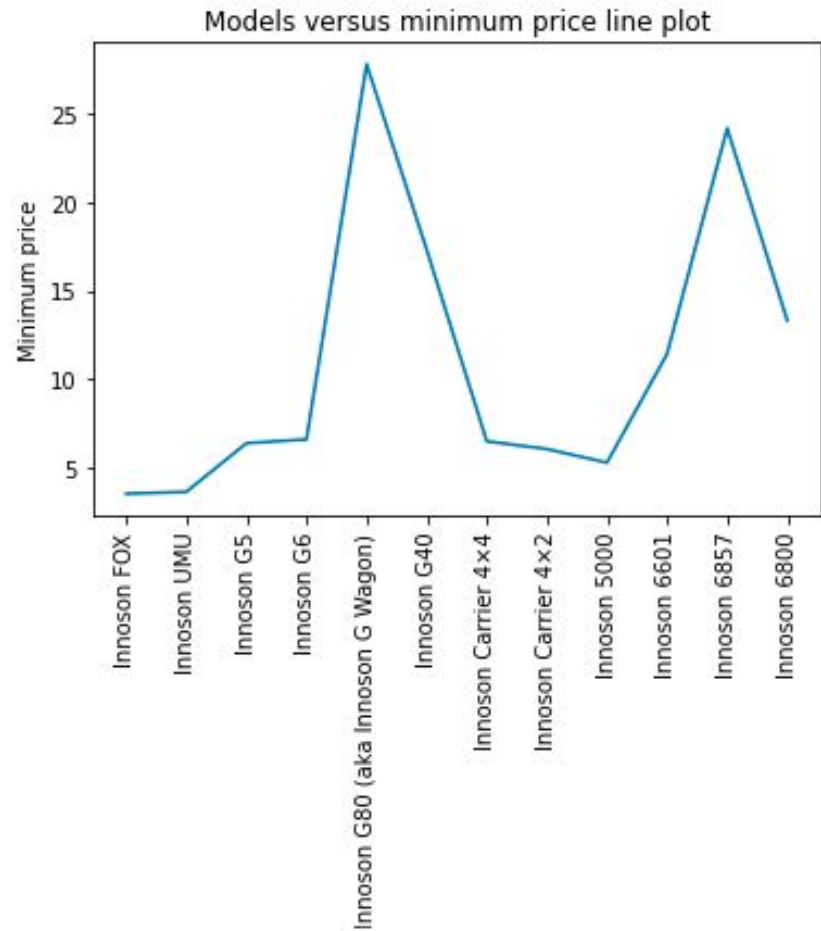
```
The least expensive Innoson vehicle is Innoson FOX which costs 3.685 million Naira.
```

The least expensive Innoson vehicle is Innoson FOX which costs 3.685 million Naira.

Data Visualizations



Data Visualizations



Data Analysis Process

| Collection | Cleaning | Analysis | Visualization |
|---|--|---|--|
| Data Collection The data used for this analysis was scrapped from a website (which would be cited later on) using python. | Data Cleaning The data was cleaned using python 's pandas library. | Data Analysis The actual analysis was also done using pandas. | Data Visualization The data visualization was done using python' s matplotlib and seaborn. |

An aerial view of the New York City skyline at dusk. The sky is a mix of dark blue and orange, with scattered clouds. The city lights are visible, and the Empire State Building stands out prominently in the center with its red and green top. Other skyscrapers are visible on the right side of the frame.

Technologies Used

- Python
- BeautifulSoup
- Requests
- Pandas
- Matplotlib
- Seaborn
- Datacamp workspace

References

- Image source:
<https://www.innosonvehicles.com/caris/>
- Website used:
<https://naijauto.com/market-news/innoson-motors-price-list-2018-288>