

Import required libraries

```
import pandas as pd
import matplotlib.pyplot as plt
```

Load the dataset

```
df = pd.read_csv('nft_sales.csv')
```

Data cleaning – remove \$ and commas, convert to numeric

```
def clean_numeric(col):
    return col.str.replace('[,$,]', '', regex=True).replace('', pd.NA).astype('float64')

df['Sales'] = clean_numeric(df['Sales'])
df['Buyers'] = clean_numeric(df['Buyers'])
df['Txns'] = clean_numeric(df['Txns'])
df['Owners'] = clean_numeric(df['Owners'])
```

Question 1 – Which collection has the highest all-time buyers?

```
highest_buyers_row = df.loc[df['Buyers'].idxmax()]
print("Collection with the highest all-time buyers:")
print(f"  Collection: {highest_buyers_row['Collections']}")
```

```
Collection with the highest all-time buyers:
Collection: Axie Infinity
Buyers: 1,790,587
```

Question 2 – Correlation between Buyers and Sales

```
correlation = df['Buyers'].corr(df['Sales'])
print("\nCorrelation between Buyers and Sales:")
print(f"    Pearson correlation coefficient: {correlation:.4f}")
print("    Interpretation: Strong positive correlation" if abs(correlation) > 0.6 else "    Interpretation: Weak/moderate correlation")
```

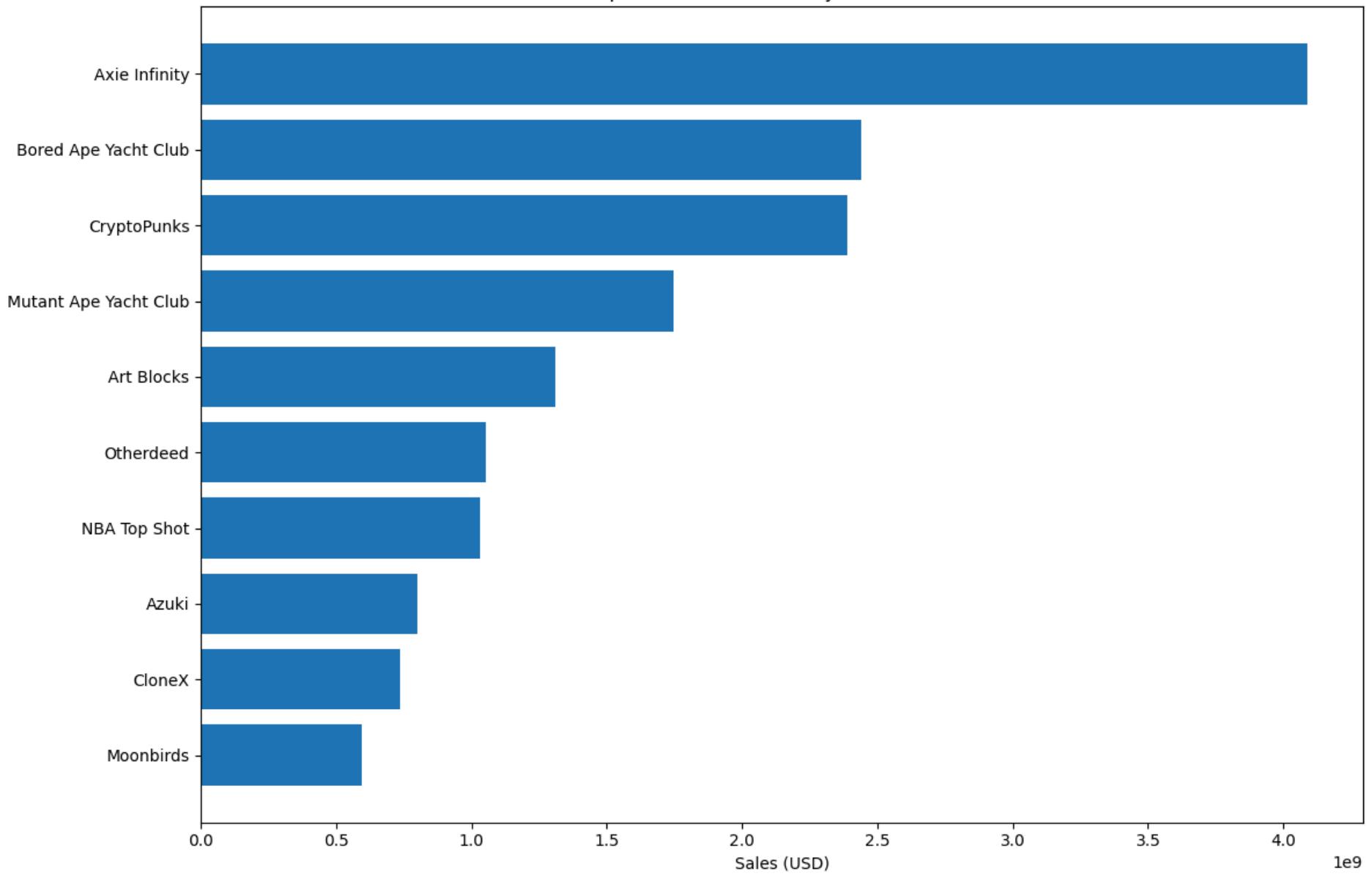
```
Correlation between Buyers and Sales:
Pearson correlation coefficient: 0.6692
Interpretation: Strong positive correlation
```

### Question 3 – Simple EDA and Visualization

#### Plot 1: Top 10 collections by Sales

```
top10_sales = df.nlargest(10, 'Sales')
plt.figure(figsize=(12, 8))
plt.barh(top10_sales['Collections'], top10_sales['Sales'])
plt.xlabel('Sales (USD)')
plt.title('Top 10 NFT Collections by All-Time Sales')
plt.gca().invert_yaxis() # Highest on top
plt.tight_layout()
plt.show()
```

Top 10 NFT Collections by All-Time Sales



Plot 2: Scatter plot – Buyers vs Sales

```
plt.figure(figsize=(10, 6))
plt.scatter(df['Buyers'], df['Sales'], alpha=0.7)
plt.xlabel('Number of Buyers')
plt.ylabel('Sales (USD)')
plt.title('Relationship Between Buyers and Sales')
plt.tight_layout()
plt.show()
```

