Herdez Forecast Project

Notebook created on: 2024-09-14

```
In [13]: import pandas as pd
         import matplotlib.pyplot as plt
In [14]: # dataset
         df = pd.read csv("..\\data\\dataset\\future forecast 52 weeks.csv")
         df.head()
Out[14]:
                                     mean_se mean_ci_lower mean_ci_upper Sucursal Cadena
                  date
                                                                                                    Recurso
                            mean
         0 2021-05-24 291.712553 148.440470
                                                                582.650528 Norte 286
                                                                                         SA 68524 Alimentos
                                                   0.774577
         1 2021-05-31 270.899519 149.223864
                                                                                         SA 68524 Alimentos
                                                 -21.573880
                                                                563.372919 Norte 286
         2 2021-06-07 245.074186 149.672052
                                                                538.426018 Norte 286
                                                                                         SA 68524 Alimentos
                                                 -48.277646
         3 2021-06-14 272.581109 150.110929
                                                                                         SA 68524 Alimentos
                                                 -21.630907
                                                                566.793124 Norte 286
         4 2021-06-21 302.708093 150.548300
                                                   7.638847
                                                                                         SA 68524 Alimentos
                                                                597.777339 Norte 286
         df["date"] = pd.to datetime(df["date"])
In [15]:
         plt.figure(figsize=(10, 6))
         plt.plot(df["date"], df["mean"], label="(Mean) Forecast", color="blue", marker="o")
```

```
plt.fill_between(
   df["date"],
   df["mean_ci_lower"],
   df["mean_ci_upper"],
   color="lightblue",
   alpha=0.5,
   label="95% Intervalo de confianza",
plt.title("Forecast - Sucursal: Norte 286, Producto: 68524 Alimentos", fontsize=14)
plt.xlabel("Fecha - 52 Semanas", fontsize=12)
plt.ylabel("Forecasted - Venta piezas", fontsize=12)
plt.xticks(rotation=45)
plt.legend()
plt.show()
```

Forecast - Sucursal: Norte 286, Producto: 68524 Alimentos

