

```
In [6]: import pandas as pd
```

```
import numpy as np
```

```
import matplotlib.pyplot as plt
```

```
from statsmodels.graphics.tsaplots import plot_acf, plot_pacf
```

```
In [7]: df = pd.read_csv(r"C:\Users\HP\OneDrive\Desktop\NLP\Data\ML471_S2_Datafile_Pract
```

```
df['Date'] = pd.to_datetime(df['Date'])
```

```
df = df.sort_values('Date')
```

```
df.set_index('Date', inplace=True)
```

```
series = df['Close_diff'].dropna()
```

```
df = df.drop(columns=['SMA_10', 'SMA_30', 'SES'], errors='ignore')
```

```
In [9]: plt.figure(figsize=(12,6))
```

```
plt.subplot(1,2,1)
```

```
plot_acf(series, ax=plt.gca(), color='blue')
```

```
plt.title('ACF of Differenced Date')
```

```
plt.subplot(1,2,2)
```

```
plot_pacf(series, ax=plt.gca(), method = 'ywm' ,color='red')
```

```
plt.title('PACF of Differenced Date')
```

```
plt.tight_layout()
```

```
plt.show()
```

