

# yewsl73p1

January 23, 2025

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[ ]: import pandas as pd
import numpy as np
import matplotlib.pyplot as plt

df=pd.read_csv("nepse_last_90_days.csv")
#analyze the index change trend for the last 7 days
#analyze the index change trend for the complete data
#print the number of days when the NEPSE index was greater than 2490 among the
↳ last 90 days
#calculate the average NEPSE index value for the last 90 days
#identify the maximum and minimum NEPSE index values within the last 90 days
```

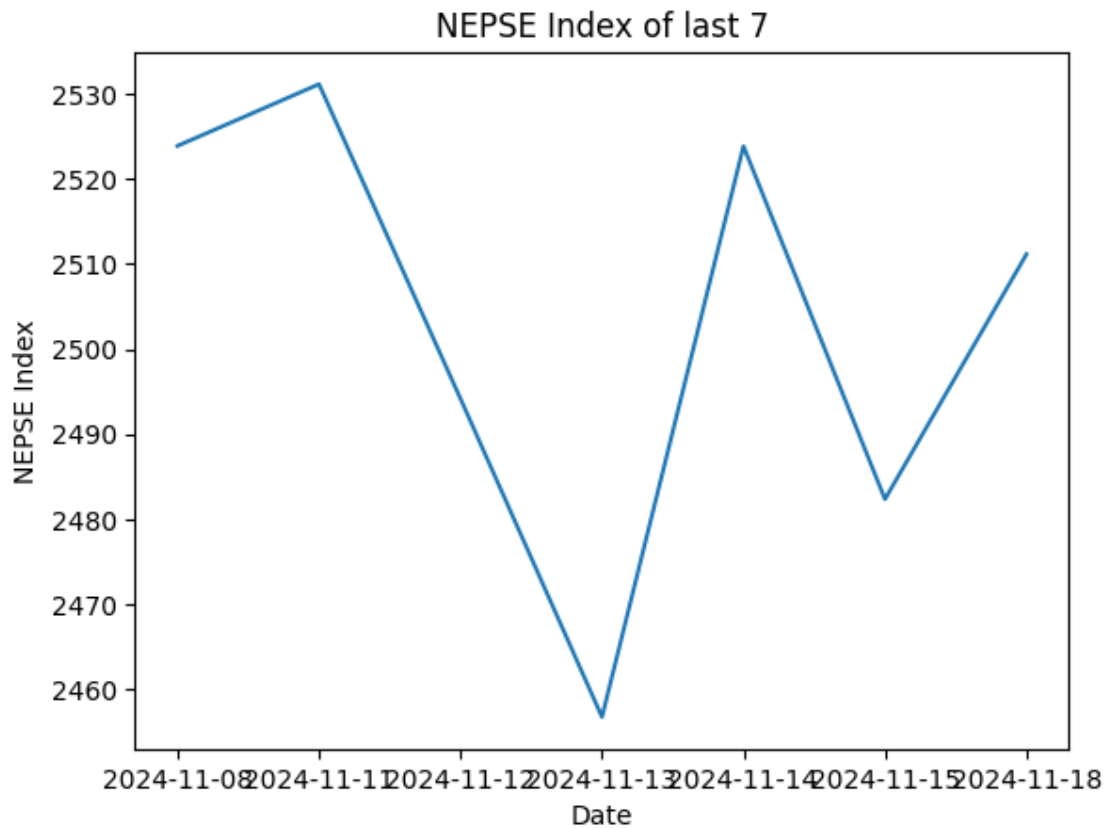
```
[ ]: last7=df.tail(7)
last7_date=last7['Date']
last7_index=last7['NEPSE Index']
last7
```

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[ ]:
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	Date	NEPSE Index
58	2024-11-08	2523.90
59	2024-11-11	2531.16
60	2024-11-12	2494.17
61	2024-11-13	2456.75
62	2024-11-14	2523.86
63	2024-11-15	2482.36
64	2024-11-18	2511.16

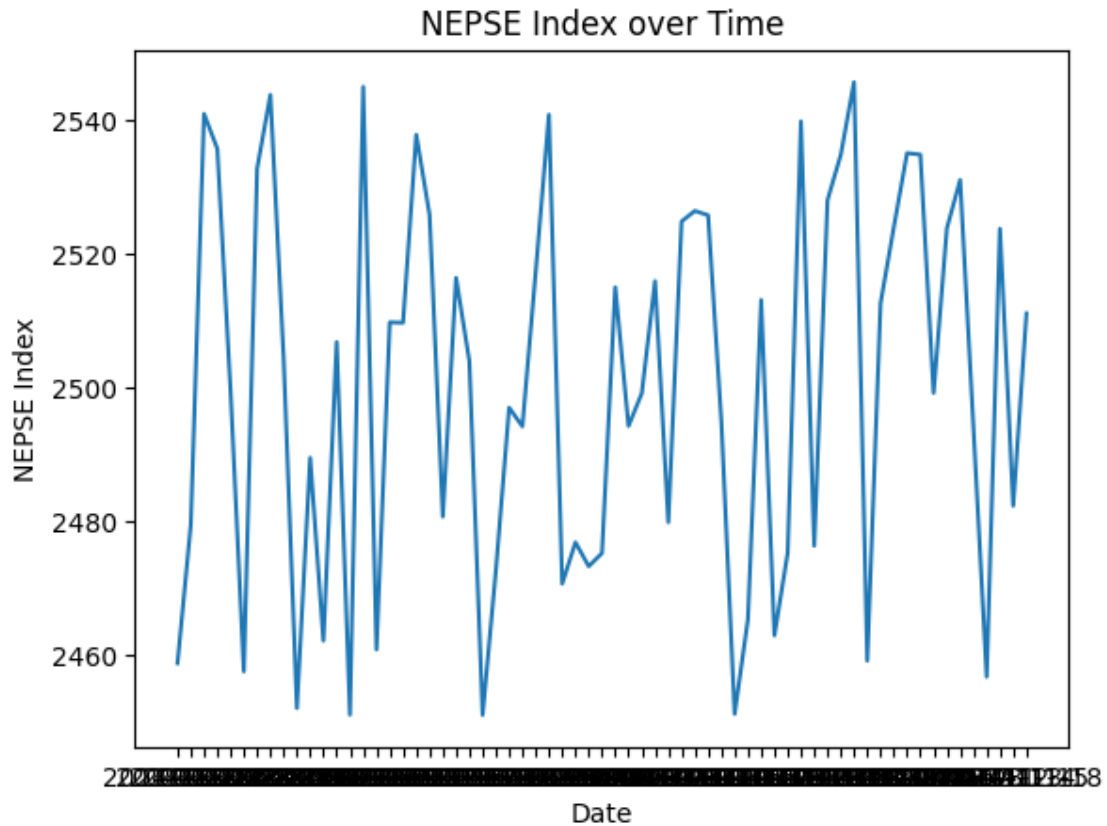
```
[ ]: #analyze the index change trend for the last 7 days
plt.plot(last7_date,last7_index)
plt.xlabel('Date')
plt.ylabel('NEPSE Index')
plt.title('NEPSE Index of last 7')
```

```
[ ]: Text(0.5, 1.0, 'NEPSE Index of last 7')
```



```
[ ]: #analyze the index change trend for the complete data
total_date=df['Date']
total_index=df['NEPSE Index']
# plt.plot(np.arr(total_date),np.arr(total_index))
plt.plot(total_date, total_index)
plt.xlabel('Date')
plt.ylabel('NEPSE Index')
plt.title('NEPSE Index over Time')
```

```
[ ]: Text(0.5, 1.0, 'NEPSE Index over Time')
```



```
[ ]: #print the number of days when the NEPSE index was greater than 2490 among the
      ↪ last 90 days
moreThan2490=total_index[df['NEPSE Index']>2490]
moreThan2490.count()
```

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[ ]: 41
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[ ]: #calculate the average NEPSE index value for the last 90 days
last90=total_index.head(90)
last90.mean()
```

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[ ]: 2500.516
```

```
[ ]: #identify the maximum and minimum NEPSE index values within the last 90 days
last90.max()
```

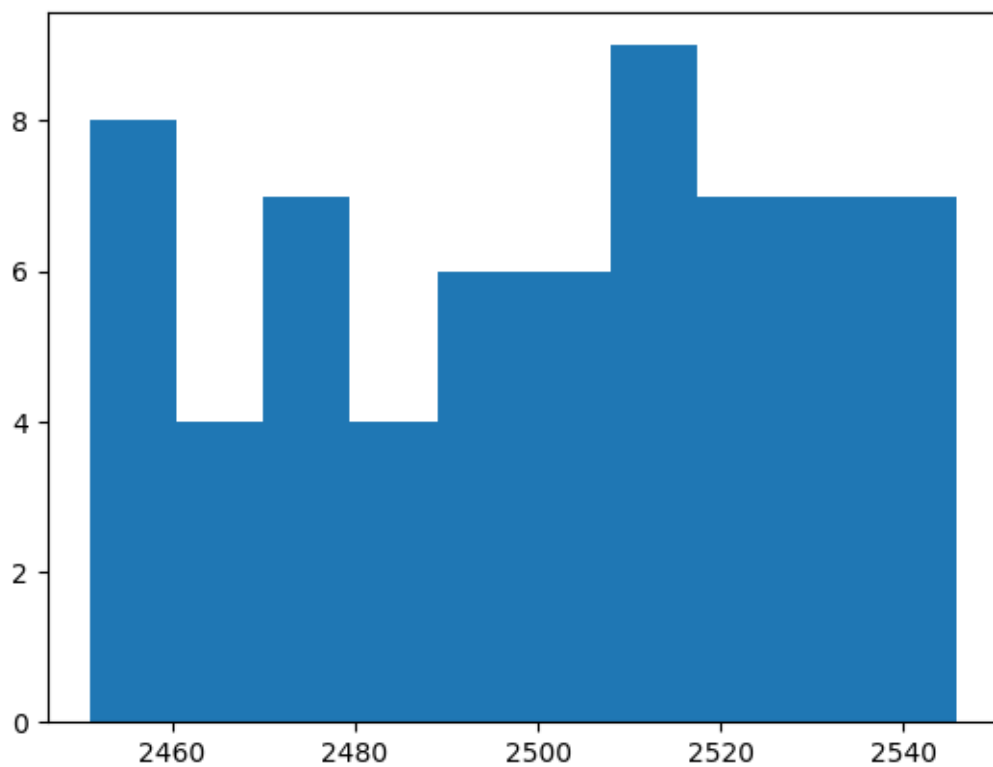
```
[ ]: 2545.8
```

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[ ]: last90.min()
```

```
[ ]: 2451.02
```

```
[ ]: df=pd.read_csv("nepse_last_90_days.csv")  
val=df['NEPSE Index']  
plt.hist(val)
```

```
[ ]: (array([8., 4., 7., 4., 6., 6., 9., 7., 7., 7.]),  
      array([2451.02 , 2460.498, 2469.976, 2479.454, 2488.932, 2498.41 ,  
            2507.888, 2517.366, 2526.844, 2536.322, 2545.8 ]),  
      <BarContainer object of 10 artists>)
```



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[ ]:
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