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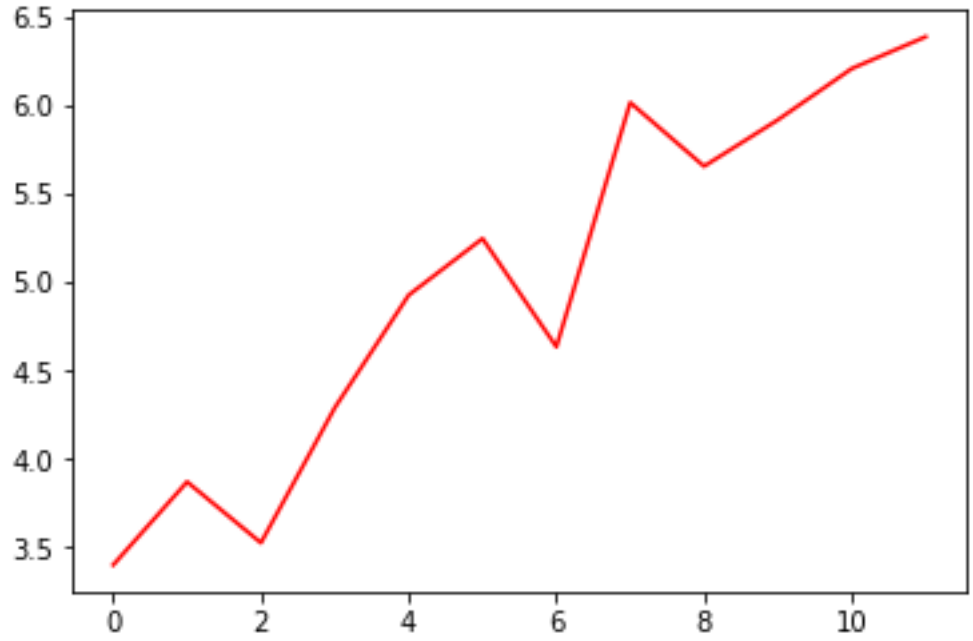
AE673 PART-2 MIDSEM




```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
d82=pd.read_csv('coviddata.csv')
d82.drop(['country_code','continent','source','population','rate_14_day'],axis=1,in
place=True)
t82=d82['indicator']=='confirmed cases'

t_france82=d82['country']=='France'; d_france82=d82[np.logical_and(t_france82,t82)]
;
t_italy82=d82['country']=='Italy'; d_italy82=d82[np.logical_and(t_italy82,t82)]
t_uk82=d82['country']=='United Kingdom'; d_uk82=df[np.logical_and(t_uk82,t82)]

cf82=d_france82['daily_count']
ci82=d_italy82['daily_count']
cuk82=d_uk82['daily_count']


cf82.add(ci82,fill_value=0)
cf82.add(cuk82,fill_value=0)

er82=cf82.to_numpy(copy=True)

array82=[]
for x82 in range(60,72):
    array82.append(np.log(er82[x82]))
plt.plot(range(len(array82)),array82,color="red")
p82=np.polyfit(range(0,12), array82, 1)
```

```
b82=p82[0]
y0_82=np.exp(p82[1])

print("b= ",b82)
print("y0= ",y0_82)
```