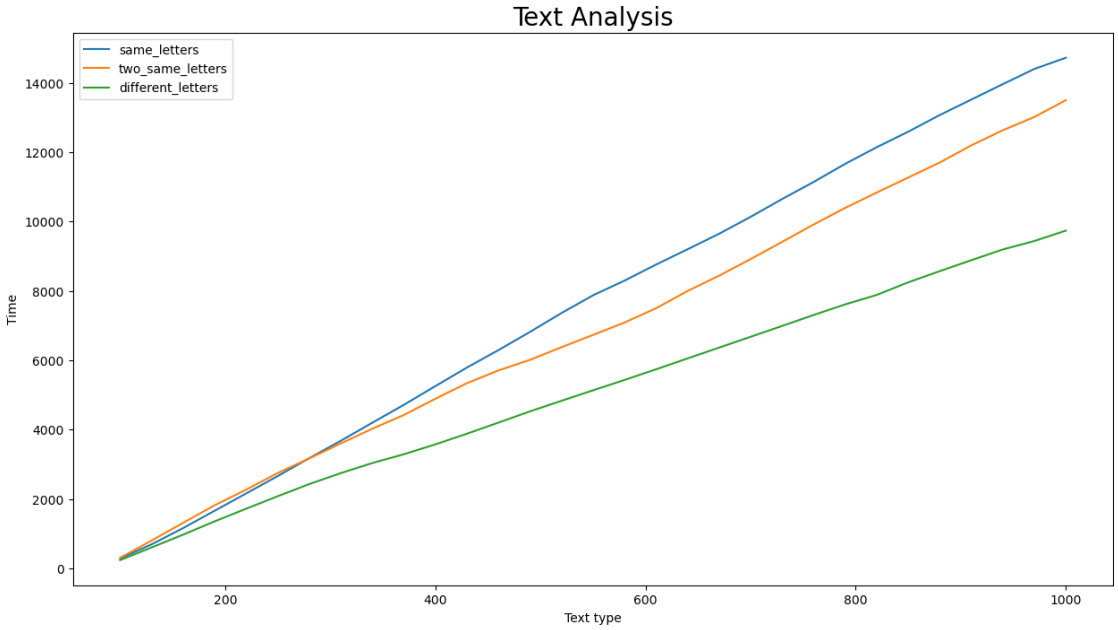
textanalysis

September 21, 2023

[34]:
```
%matplotlib inline
import numpy as np
import matplotlib.pyplot as plt
```

[40]:
```
text_size = []
for i in range(100, 1001, 30):
    text_size.append(i)
same_letters = []
two_same_letters = []
different_letters = []
types = ""
with open ("result.txt", "r") as file:
    for nums in file:
        if nums[-2] == ":":
            types = nums[0:-2]
            continue
        if types == "First":
            k = nums.split(":")
            same_letters.append(float(k[1]))
        elif types == 'Second':
            k = nums.split(":")
            two_same_letters.append(float(k[1]))
        else:
            k = nums.split(":")
            different_letters.append(float(k[1]))

fig, ax = plt.subplots()
fig.set_size_inches(15,8)
ax.set_xlabel("Text type")
ax.set_ylabel("Time")
ax.plot(text_size , same_letters, label ='same_letters')
ax.plot(text_size , two_same_letters, label = 'two_same_letters')
ax.plot(text_size , different_letters, label = 'different_letters')
ax.set_title("Text Analysis", fontsize= 20)
plt.legend(loc='best')
plt.show()
```


Text Analysis
same_letters
two_same_letters
different_letters
Time
Text type
0
2000
4000
6000
8000
10000
12000
14000
200
400
600
800
1000