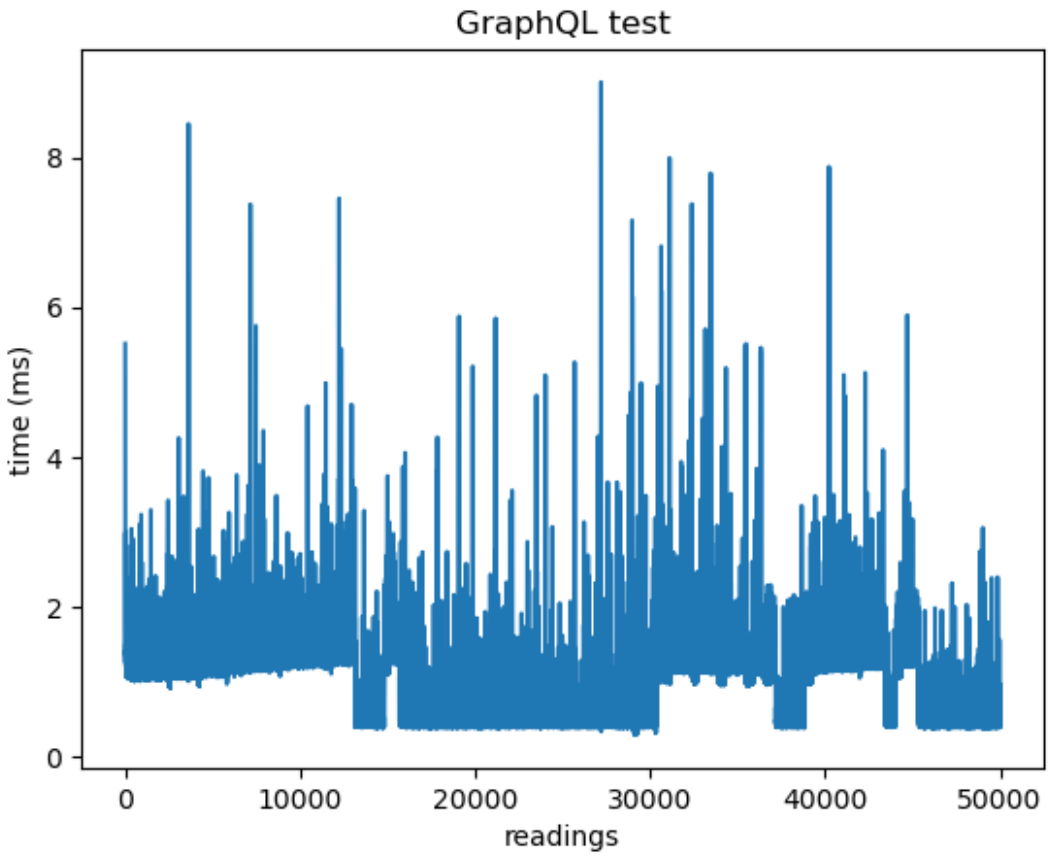
```
import pandas as pd
import matplotlib.pyplot as plt
```

Local test

Test size: 50,000

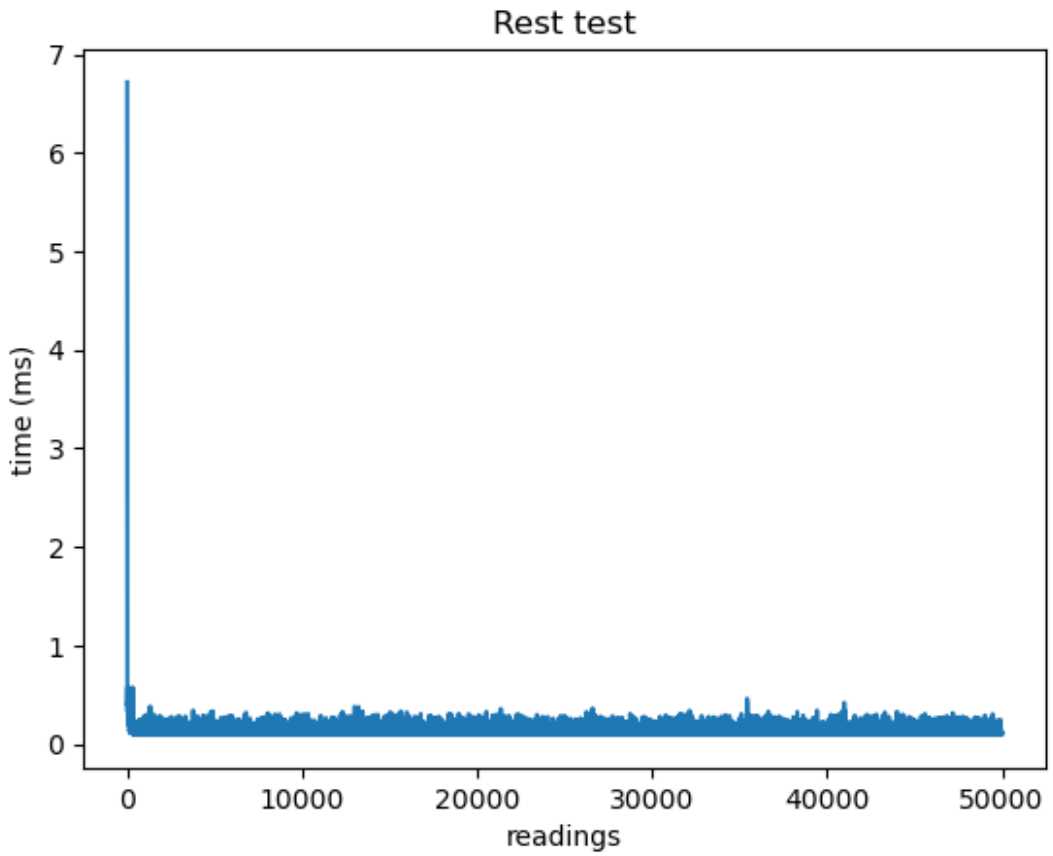
```
df_graphql_local = pd.read_csv('./graphql-test/local_data.csv')
df_rest_local = pd.read_csv('./rest-test/local_data.csv')

df_graphql_local = df_graphql_local / 1000000
df_rest_local = df_rest_local / 1000000

# only by removing these massive values, it's possible to see the
difference
df_graphql_local['Values'] = df_graphql_local['Values'].apply(lambda
x: 2 if x > 10 else x)

y = df_graphql_local['Values']
x = range(len(y))
plt.plot(x, y)
plt.xlabel('readings')
plt.ylabel('time (ms)')
plt.title('GraphQL test')
```

```
Text(0.5, 1.0, 'GraphQL test')
```



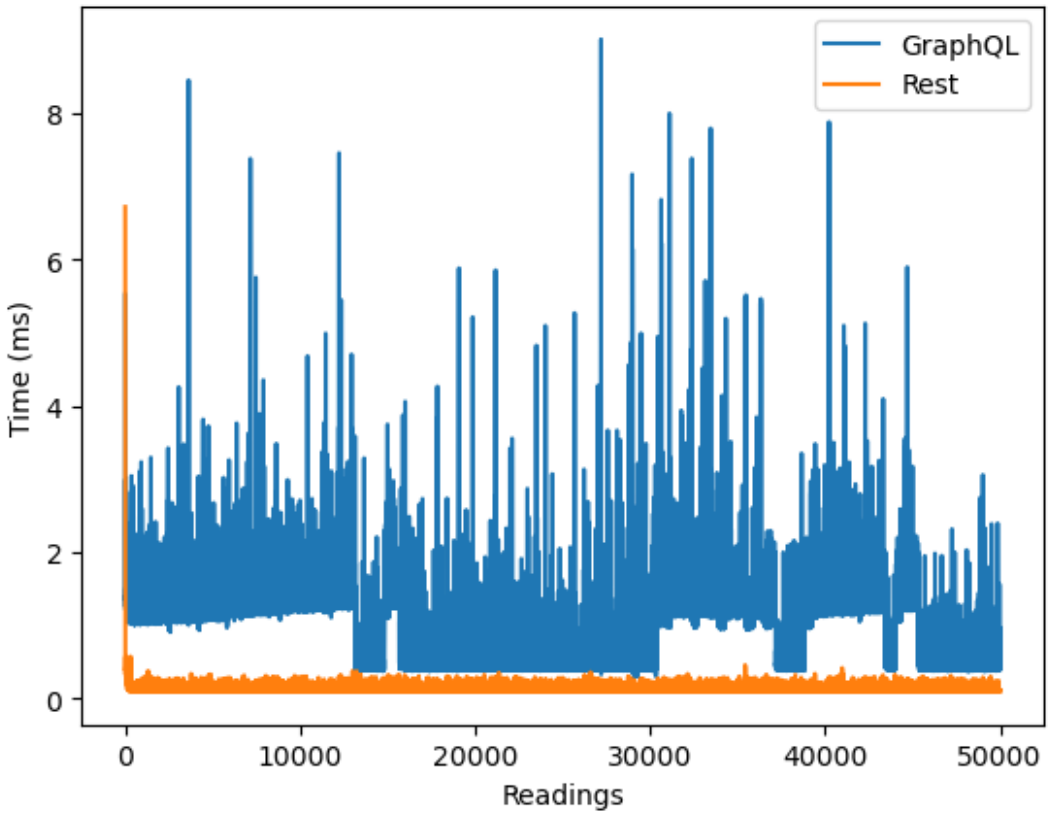

```
df_rest_local['Values'] = df_rest_local['Values'].apply(lambda x: 0 if
x > 1000000 else x)

y = df_rest_local['Values']
x = range(len(y))
plt.plot(x, y)
plt.xlabel('readings')
plt.ylabel('time (ms)')
plt.title('Rest test')
```

```
Text(0.5, 1.0, 'Rest test')
```




```
y1 = df_graphql_local["Values"]
y2 = df_rest_local["Values"]
x = range(len(y1))
plt.plot(x, y1, label='GraphQL')
plt.xlabel('Readings')
plt.ylabel('Time (ms)')
plt.plot(x, y2, label='Rest')
plt.legend()
```

```
<matplotlib.legend.Legend at 0x126ede3d0>
```




```
print(df_graphql_local.mean())
print(df_rest_local.mean())
```

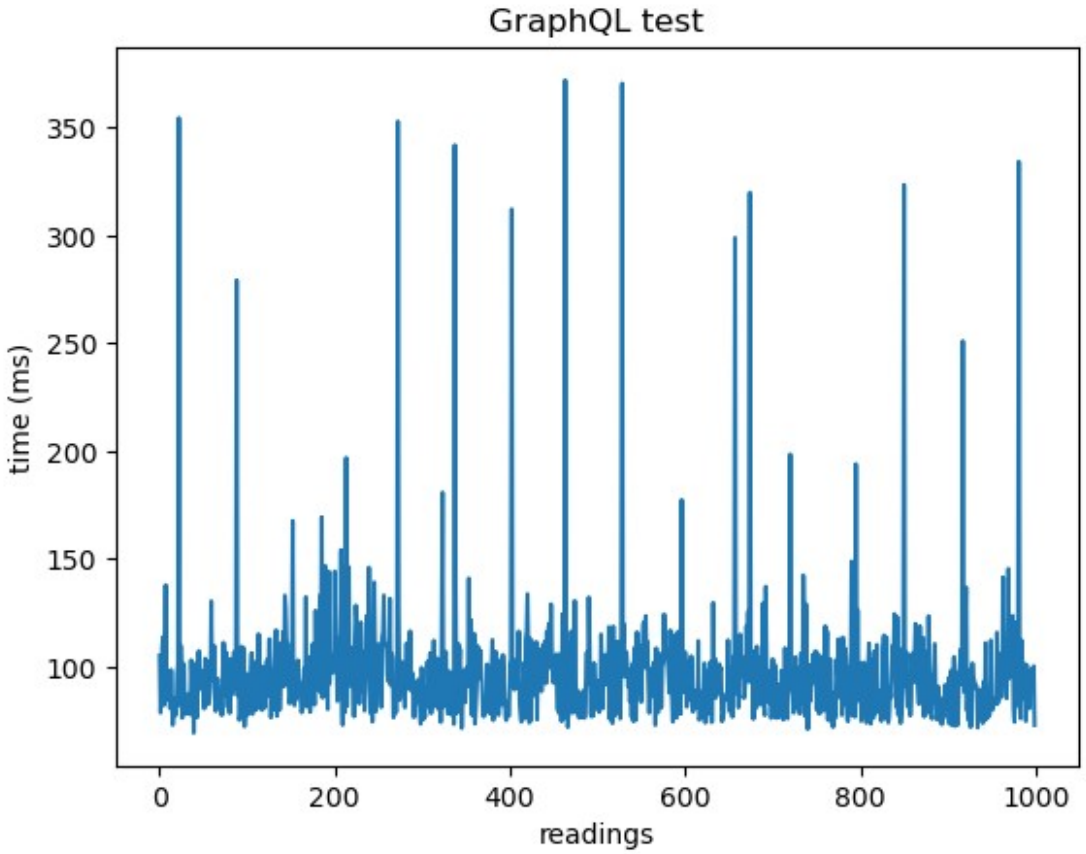
```
Values    0.919729
dtype: float64
Values    0.113823
dtype: float64
```

Cloud test

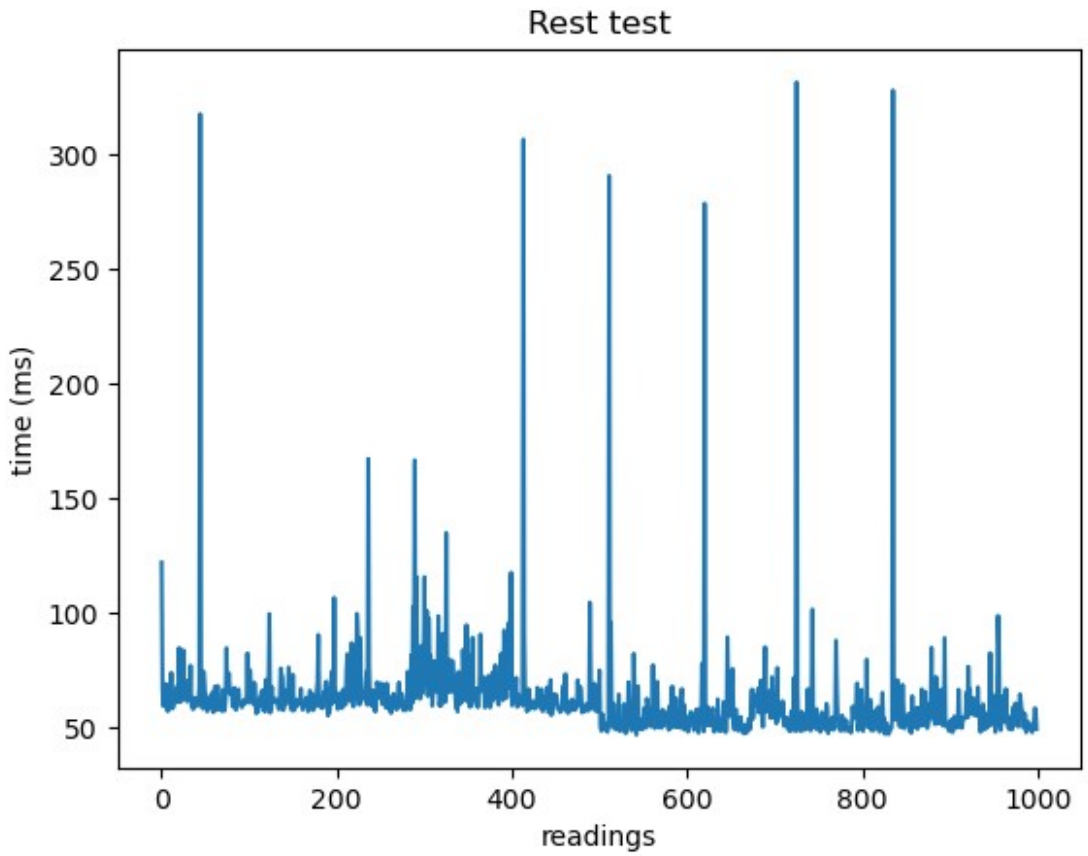
Test size: 1,000

```
df_graphql_cloud = pd.read_csv('./graphql-test/cloud_data.csv')
df_rest_cloud = pd.read_csv('./rest-test/cloud_data.csv')

df_graphql_cloud = df_graphql_cloud / 1000000
df_rest_cloud = df_rest_cloud / 1000000

y = df_graphql_cloud['Values']
x = range(len(y))
plt.plot(x, y)
plt.xlabel('readings')
plt.ylabel('time (ms)')
plt.title('GraphQL test')
```

```
Text(0.5, 1.0, 'GraphQL test')
```

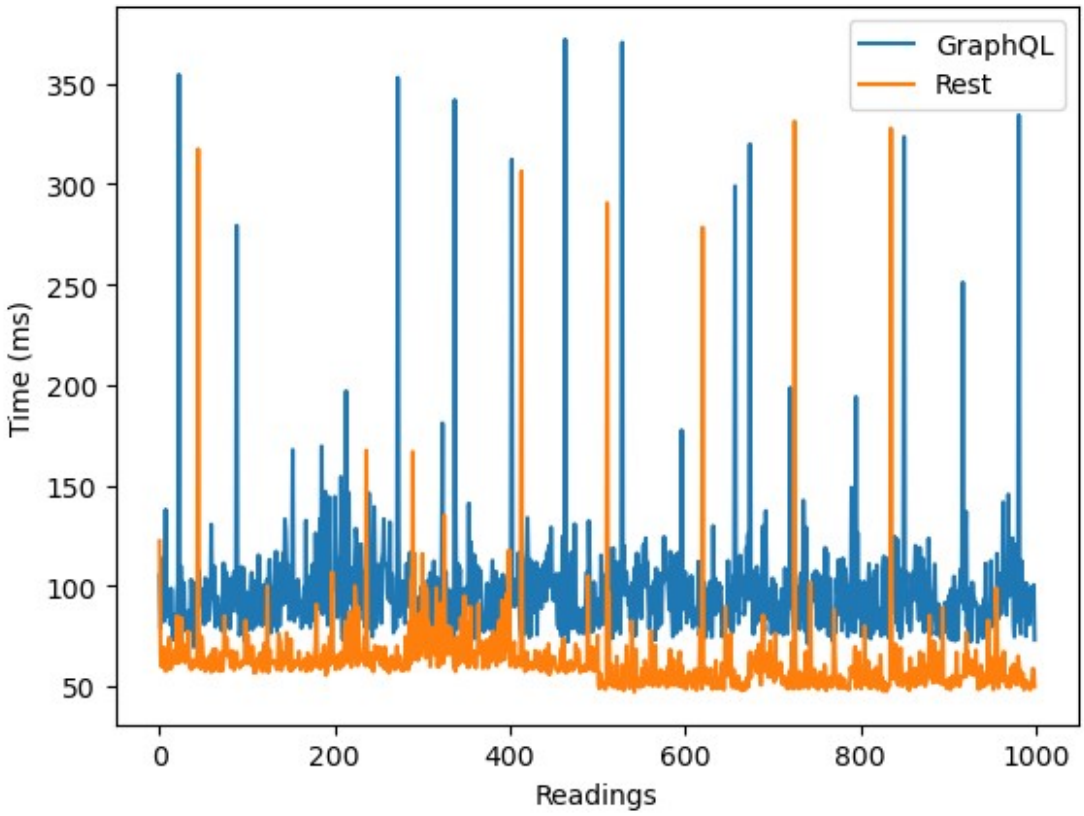



```
y = df_rest_cloud['Values']
x = range(len(y))
plt.plot(x, y)
plt.xlabel('readings')
plt.ylabel('time (ms)')
plt.title('Rest test')

Text(0.5, 1.0, 'Rest test')
```




```
y1 = df_graphql_cloud["Values"]
y2 = df_rest_cloud["Values"]
x = range(len(y1))
plt.plot(x, y1, label='GraphQL')
plt.xlabel('Readings')
plt.ylabel('Time (ms)')
plt.plot(x, y2, label='Rest')
plt.legend()
```

```
<matplotlib.legend.Legend at 0x1273a3d90>
```




```
print(df_graphql_cloud.mean())
print(df_rest_cloud.mean())
```

```
Values    97.935685
dtype: float64
Values    62.541785
dtype: float64
```