

analyse_data

January 30, 2021

```
[1]: import matplotlib.pyplot as plt
import pandas as pd
```

```
[2]: df = pd.read_csv("onlocalhost.csv")
df.head()
```

```
[2]:
```

	RecvTime	oldRecvTime	SendTime	oldSendTime
0	59258	59258	59057	59057
1	59258	59258	59057	59057
2	59258	59258	59057	59057
3	59258	59258	59057	59057
4	59258	59258	59057	59057

```
[3]: diff = df["RecvTime"] - df["oldRecvTime"] - (df["SendTime"] - df["oldSendTime"])
diff.head()
```

```
[3]: 0    0
1    0
2    0
3    0
4    0
dtype: int64
```

```
[4]: fig, ax1 = plt.subplots()

color = 'tab:red'
ax1.set_xlabel('')
ax1.set_ylabel('diff', color=color) # we already handled the x-label with ax1
ax1.plot(diff,color=color)
plt.title("localhost")
plt.show()
```



```
[5]: df = pd.read_csv("25mschannel.csv")
      df.head()
```

```
[5]:   RecvTime  oldRecvTime  SendTime  oldSendTime
0     40399         40399     40166         40166
1     40399         40399     40166         40166
2     40399         40399     40166         40166
3     40399         40399     40166         40166
4     40399         40399     40166         40166
```

```
[6]: diff = df["RecvTime"] - df["oldRecvTime"] - (df["SendTime"] - df["oldSendTime"])
      diff.head()
```

```
[6]: 0    0
     1    0
     2    0
     3    0
     4    0
      dtype: int64
```

```
[8]: fig, ax1 = plt.subplots()

      color = 'tab:red'
```

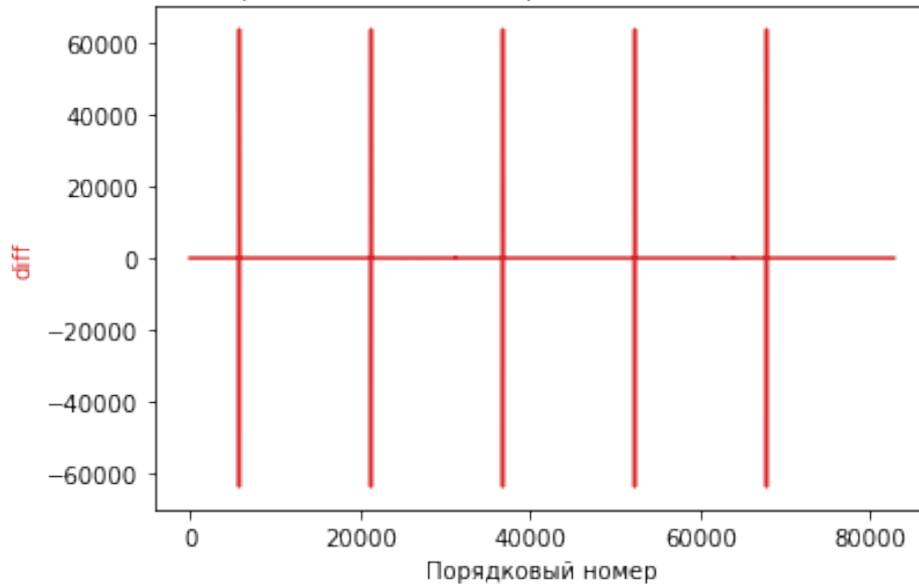
```

ax1.set_xlabel('')
ax1.set_ylabel('diff', color=color) # we already handled the x-label with ax1
ax1.plot(diff,color=color)

plt.title("""
25, 40 80""")
plt.show()

```

График построен на основе данных, при пропуске трафика через omnet, значение задержки канала было равно 25, а пинг был между 40 и 80



```

[9]: df = pd.read_csv("70mschannel.csv")
df.head()

```

```

[9]:   RecvTime  oldRecvTime  SendTime  oldSendTime
0      56156      56156      55859      55859
1      56156      56156      55859      55859
2      56156      56156      55859      55859
3      56156      56156      55859      55859
4      56156      56156      55859      55859

```

```

[10]: diff = df["RecvTime"] - df["oldRecvTime"] - (df["SendTime"] - df["oldSendTime"])
diff.head()

```

```

[10]: 0    0
      1    0
      2    0
      3    0

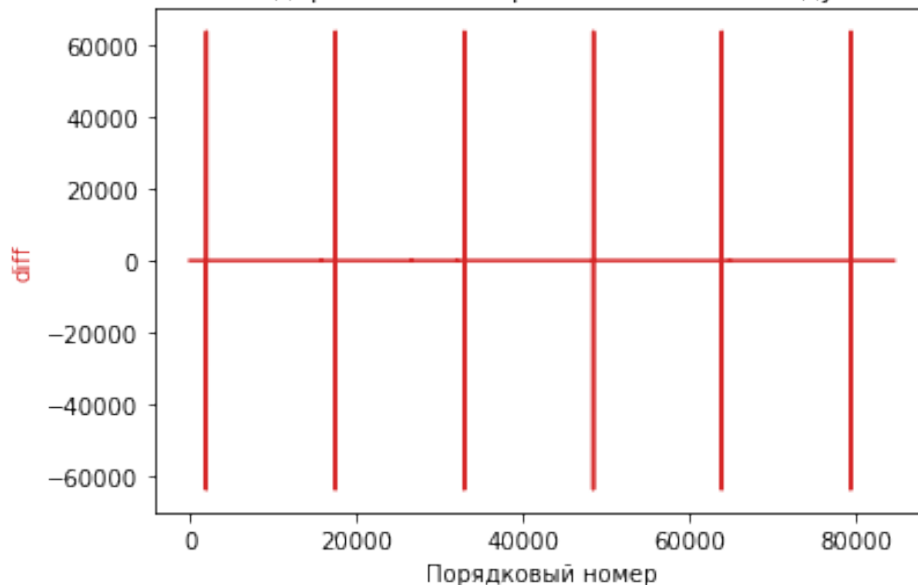
```

```
4    0
dtype: int64
```

```
[11]: fig, ax1 = plt.subplots()

color = 'tab:red'
ax1.set_xlabel('')
ax1.set_ylabel('diff', color=color) # we already handled the x-label with ax1
ax1.plot(diff,color=color)
plt.title("""
70, 150 190""")
plt.show()
```

График построен на основе данных, при пропуске трафика через omnet,
значение задержки канала равно 70, пинг между 150 и 190



```
[12]: df = pd.read_csv("500rate.csv")
df.head()
```

```
[12]:
```

	RecvTime	oldRecvTime	SendTime	oldSendTime
0	52437	52437	52204	52189
1	52437	52437	52204	52204
2	52437	52437	52204	52204
3	52437	52437	52204	52204
4	52437	52437	52204	52204

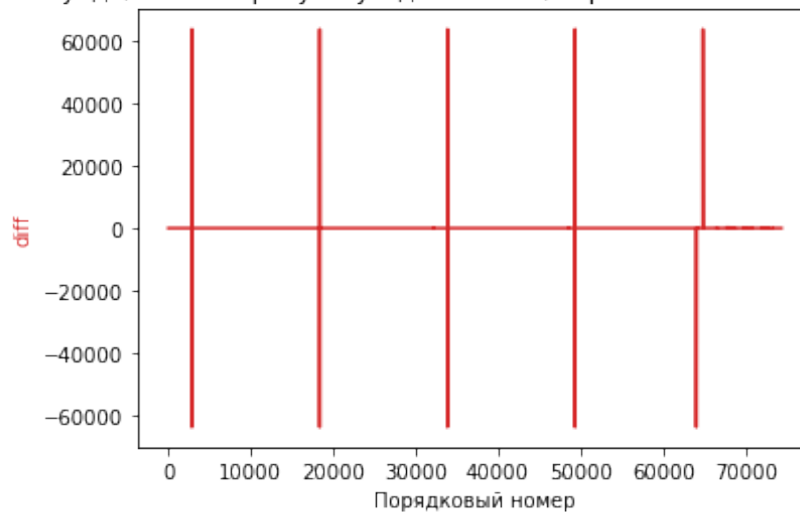
```
[13]: diff = df["RecvTime"] - df["oldRecvTime"] - (df["SendTime"] - df["oldSendTime"])
diff.head()
```

```
[13]: 0    -15
      1     0
      2     0
      3     0
      4     0
      dtype: int64
```

```
[14]: fig, ax1 = plt.subplots()

color = 'tab:red'
ax1.set_xlabel('')
ax1.set_ylabel('diff', color=color) # we already handled the x-label with ax1
ax1.plot(diff,color=color)
plt.title("""
250 , 500 , omnet,
""")
plt.show()
```

График построен на основе данных, при пропуске трафика через omnet,
на 250 секунде, снизил пропускную до 500кбит, картинка начала потихоньку плыть



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[ ]:
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