Get Function Data Validation

November 1, 2022

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

```
[2]: def load_dataset(results):
         df = pd.read_csv(results,
      ↪usecols=['timeStamp','elapsed','success','bytes','Latency',
      ↪'IdleTime','Connect'])
         df['totalElapsed'] = df.elapsed.cumsum()
         df['throughput'] = ((df.index+1)/(df.totalElapsed/(df.index+1))*60000)
         return df
```

```
[3]: def load_summary(summary, label):
         df = pd.read_csv(summary)
         df.insert(0, "Function", label)
         df.drop(columns=["Average","Min","Max", "# Samples"], inplace=True)
         return df
```

```
[6]: dir1= "NearVotingJMeterTests3/"
     dir2= "NearVotingJMeterTests4/"
     dir3= "validation_get/"
```

```
[7]: get = load_dataset(dir1+'Get/Get_1000T_250.csv')
     get_sum = load_summary(dir1+'Get/Get_1000T_250_Sum.csv',"get")

     get_v2 = load_dataset(dir2+'Get/Get_1KT.csv')
     get_sum_v2 = load_summary(dir2+'Get/Get_1KT_sum.csv',"get")

     get_compressed_v2 = load_dataset(dir2+'Get/Get_1KT_compressed.csv')
     get_compressed_sum_v2 = load_summary(dir2+'Get/Get_1KT_compressed_Sum.
      ↪csv',"get")

     get_v3 = load_dataset(dir3+'Get_1KT.csv')
     get_sum_v3 = load_summary(dir3+'Get_1KT_Sum.csv',"get")
```
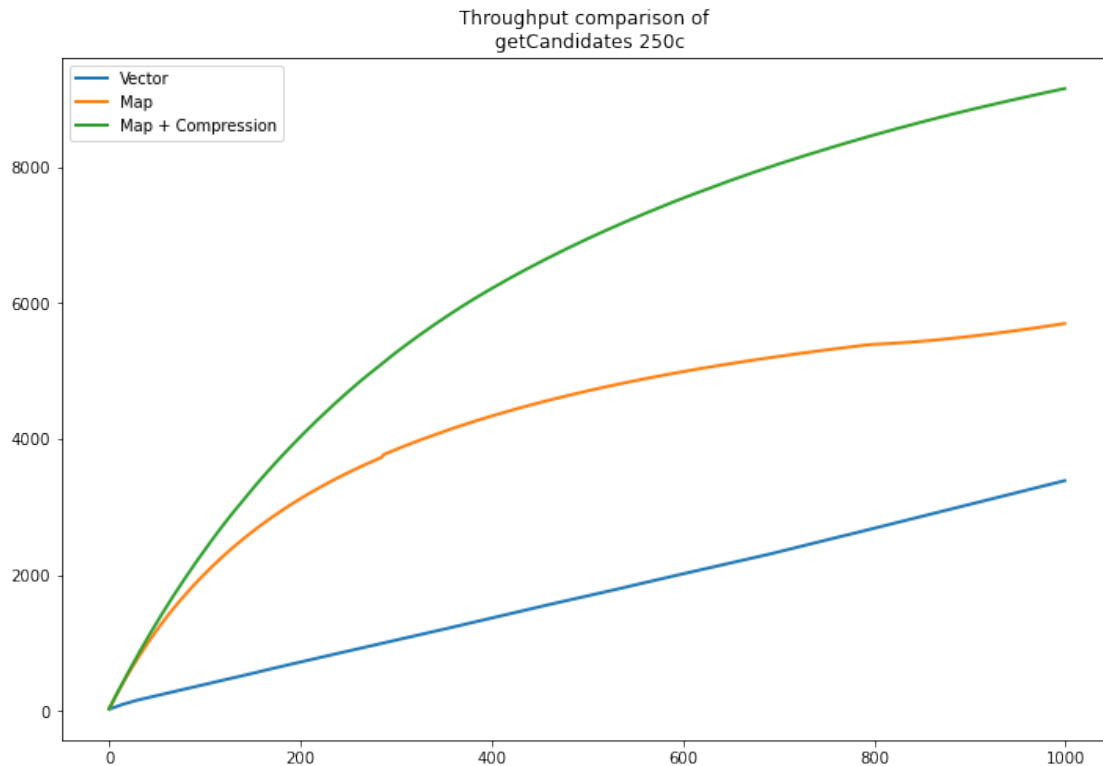
```
[8]: fig, ax = plt.subplots()
     fig.set_figheight(8)
     fig.set_figwidth(12)
```

```
ax.plot(range(0,1000), get.throughput, linewidth=2.0, label="Vector")
ax.plot(range(0,1000), get_v2.throughput, linewidth=2.0, label="Map")
ax.plot(range(0,1000), get_compressed_v2.throughput, linewidth=2.0, label="Map↳
  ↪+ Compression")
ax.title.set_text('Throughput comparison of \n getCandidates 250c')
ax.legend(loc="upper left")
```

[8]: <matplotlib.legend.Legend at 0x18c76922910>


```
fig, ax = plt.subplots()
fig.set_figheight(8)
fig.set_figwidth(12)
ax.plot(range(0,1000), get_v3.throughput, linewidth=2.0, label="Validation")
ax.plot(range(0,1000), get_v2.throughput, linewidth=2.0, label="Map v1")
ax.plot(range(0,1000), get_compressed_v2.throughput, linewidth=2.0, label="Map↳
  ↪+ Compression")
ax.title.set_text('Non Compressed Get Validation')
ax.legend(loc="upper left")
```

[12]: <matplotlib.legend.Legend at 0x18c79126bb0>

Non Compressed Get Validation