```python
In [7]: import matplotlib.pyplot as plt
        import numpy as np
```

```python
In [9]: T = np.zeros(5)
        P = np.zeros(5)
        T_qsort = np.zeros(5)
        T_omp = np.zeros(5)
        n = 0
        with open('stats.txt', 'r') as f:
            for data in f:
                if n >= 0:
                    data = data.split(' ')
                    if n % 3 == 0:
                        for i, s in enumerate(data):
                            if (i == 0):
                                s = s.split('s')
                                T[n // 3] = float(s[0])
                            elif (i == 3):
                                P[n // 3] = float(s)
                    elif n % 3 == 1:
                        s = data[0].split('s')
                        T_qsort[n // 3] = float(s[0])
                    else:
                        s = data[0].split('s')
                        T_omp[n // 3] = float(s[0])
                n += 1

        S_p = T[0] / T
        E_p = S_p / P
        S_p_omp = T_omp[0] / T_omp
        E_p_omp = S_p_omp / P
```

```python
In [10]: print(T)
         print(P)
         print(T_qsort)
         print(T_omp)
         print(S_p)
         print(E_p)
         print(S_p_omp)
         print(E_p_omp)
```

```
[ 0.322568  0.204074  0.208902  0.26419   0.290453]
[ 1.   2.   3.   4.   5.]
[ 0.221119  0.24477   0.226154  0.243979  0.256397]
[ 0.316601  0.339821  1.008122  0.341743  0.380352]
[ 1.          1.58064232  1.54411159  1.22096976  1.11056866]
[ 1.          0.79032116  0.51470386  0.30524244  0.22211373]
[ 1.          0.93166991  0.31405028  0.9264301   0.83238947]
[ 1.          0.46583495  0.10468343  0.23160752  0.16647789]
```
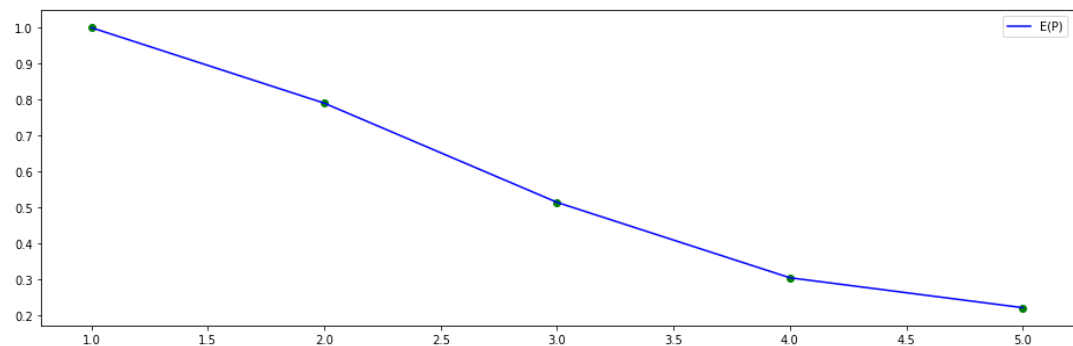
```
In [11]: plt.figure(figsize=(16, 5))
         plt.plot(P, T, color='blue', label=u'T(P)')
         plt.scatter(P, T, color='green')
         plt.plot(P, T_qsort, color='yellow', label=u'T_qsort, P = 1')
         plt.scatter(P, T_qsort, color='green')
         plt.plot(P, T_omp, color='orange', label=u'T_omp(P)')
         plt.scatter(P, T_omp, color='green')
         plt.legend()
         plt.show()
```
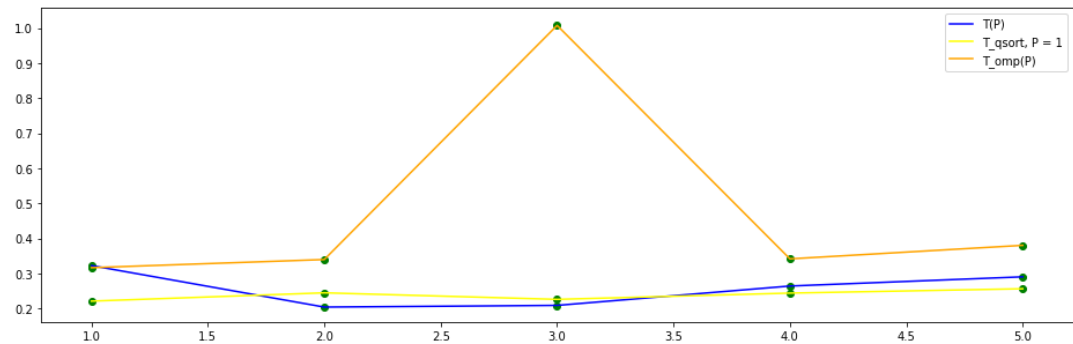


```
In [14]: plt.figure(figsize=(16, 5))
         plt.plot(P, S_p, color='blue', label=u'S(P)')
         plt.scatter(P, S_p, color='green')
         plt.legend()
         plt.show()
```
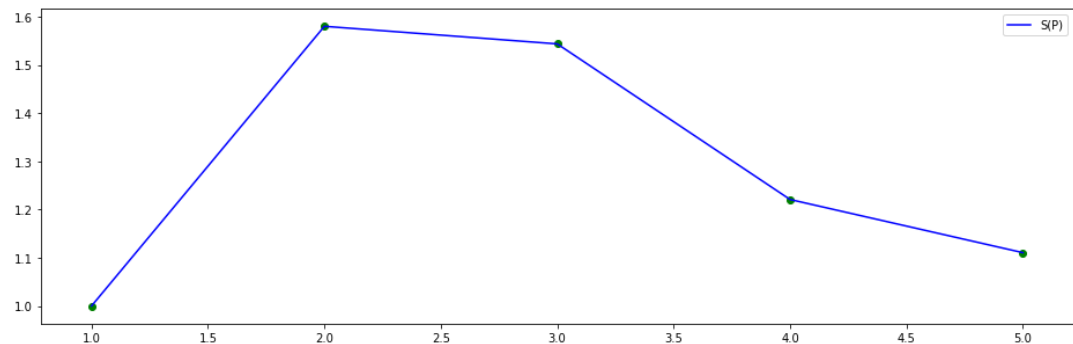


```
In [15]: plt.figure(figsize=(16, 5))
         plt.plot(P, E_p, color='blue', label=u'E(P)')
         plt.scatter(P, E_p, color='green')
         plt.legend()
         plt.show()
```



```
In [ ]:
```