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

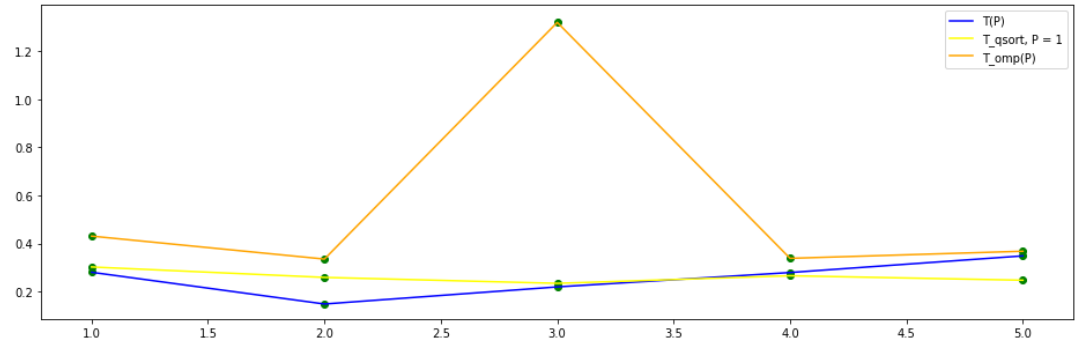
In [2]:
```
T = np.zeros(5)
P = np.zeros(5)
T_qsort = np.zeros(5)
T_omp = np.zeros(5)
n = 0
with open('stats.txt', 'r') as f:
    for data in f:
        if n >= 0:
            data = data.split(' ')
            if n % 3 == 0:
                for i, s in enumerate(data):
                    if (i == 0):
                        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
```

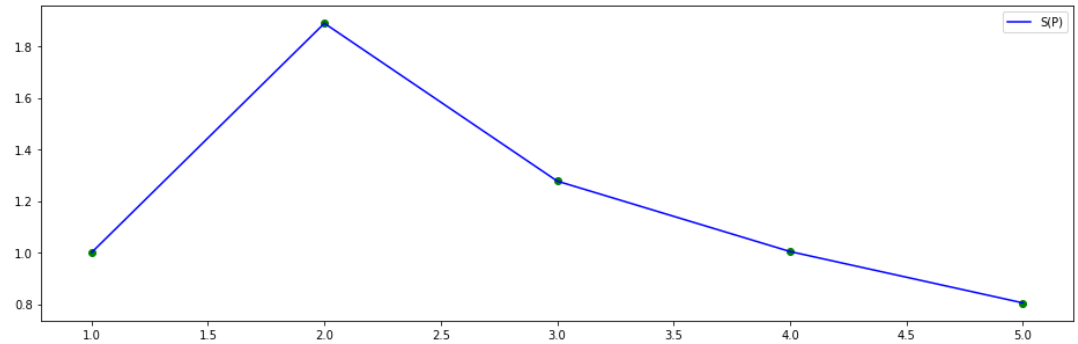
In [3]:
```
print(T)
print(P)
print(T_qsort)
print(T_omp)
print(S_p)
print(E_p)
print(S_p_omp)
print(E_p_omp)
```

```
[ 0.280454  0.148385  0.219549  0.279363  0.34863 ]
[ 1.  2.  3.  4.  5.]
[ 0.302427  0.259075  0.234377  0.265936  0.247379]
[ 0.430887  0.335335  1.320003  0.338441  0.367932]
[ 1.          1.89004279  1.2774096   1.00390531  0.80444597]
[ 1.          0.9450214   0.4258032   0.25097633  0.16088919]
[ 1.          1.28494491  0.3264288   1.27315248  1.17110499]
[ 1.          0.64247245  0.1088096   0.31828812  0.234221  ]
```

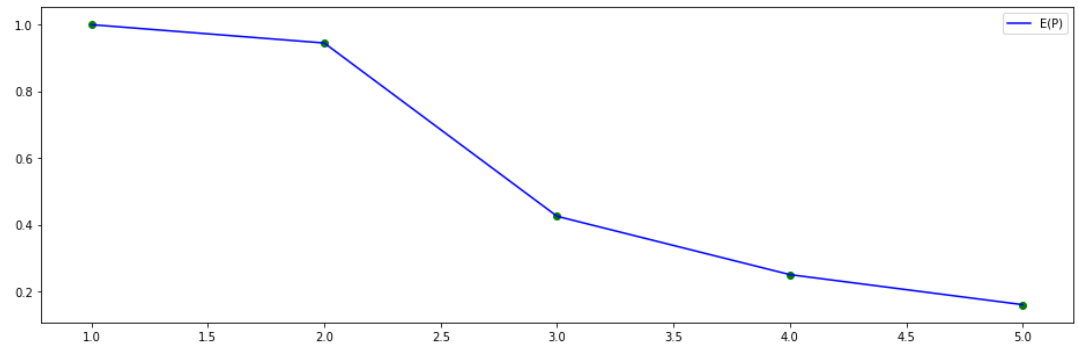
In [4]:
```
plt.figure(figsize=(16, 5))
plt.plot(P, T, color='blue', label=u'T(P)')
plt.scatter(P, T, color='green')
plt.plot(P, T_qsort, color='yellow', label=u'T_qsort, P = 1')
plt.scatter(P, T_qsort, color='green')
plt.plot(P, T_omp, color='orange', label=u'T_omp(P)')
plt.scatter(P, T_omp, color='green')
plt.legend()
plt.show()
```



In [5]:
```
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 [6]:
```
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 [ ]: