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

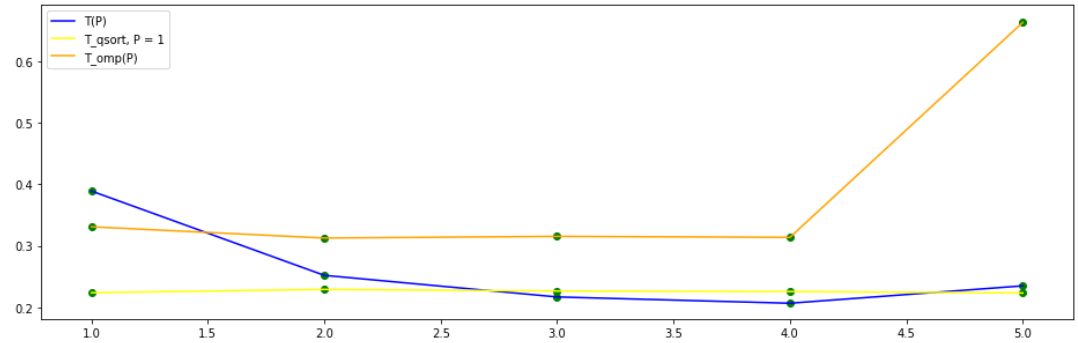
In [2]:
```
T = np.zeros(5)
P = np.zeros(5)
T_qsort = np.zeros(5)
T_omp = np.zeros(5)
n = 0
with open('stats.txt', 'r') as f:
    for data in f:
        if n >= 0:
            data = data.split(' ')
            if n % 3 == 0:
                for i, s in enumerate(data):
                    if (i == 0):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

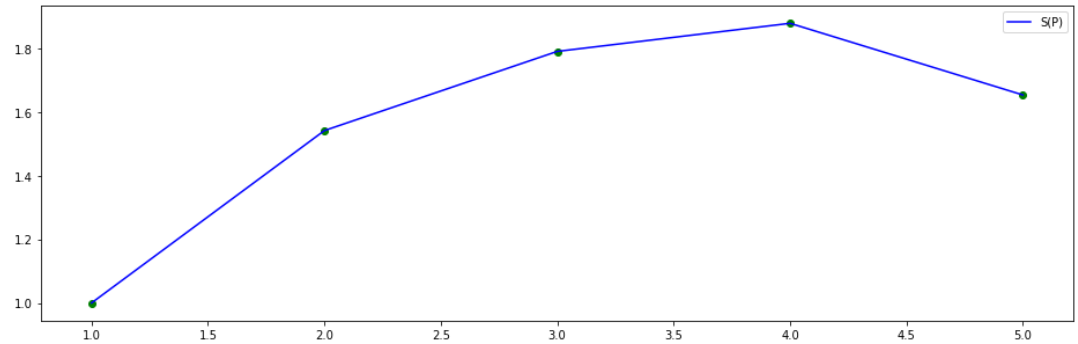
In [3]:
```
print(T)
print(P)
print(T_qsort)
print(T_omp)
print(S_p)
print(E_p)
print(S_p_omp)
print(E_p_omp)
```

```
[ 0.389235  0.252241  0.217137  0.206916  0.235143]
[ 1.  2.  3.  4.  5.]
[ 0.223995  0.229399  0.226767  0.225959  0.223495]
[ 0.331103  0.31286   0.31556   0.31398   0.663208]
[ 1.          1.54310758  1.79257796  1.88112567  1.65531187]
[ 1.          0.77155379  0.59752599  0.47028142  0.33106237]
[ 1.          1.05831043  1.04925529  1.05453532  0.49924458]
[ 1.          0.52915521  0.34975176  0.26363383  0.09984892]
```

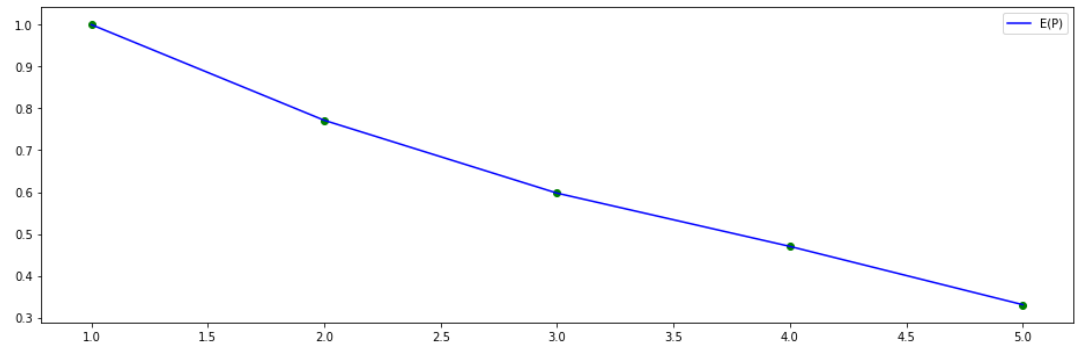
In [4]:
```
plt.figure(figsize=(16, 5))
plt.plot(P, T, color='blue', label=u'T(P)')
plt.scatter(P, T, color='green')
plt.plot(P, T_qsort, color='yellow', label=u'T_qsort, P = 1')
plt.scatter(P, T_qsort, color='green')
plt.plot(P, T_omp, color='orange', label=u'T_omp(P)')
plt.scatter(P, T_omp, color='green')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