In [2]:

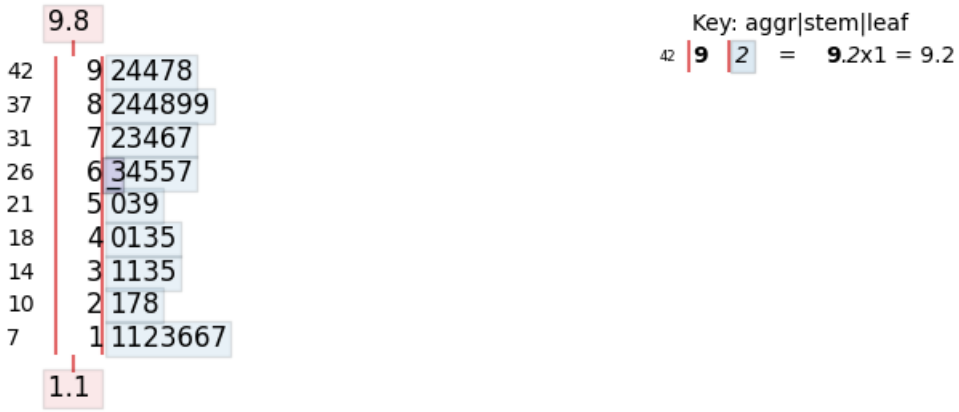
```
# 연습문제 8, p43
import stemgraphic

time = [5.9, 5.3, 1.6, 7.4, 9.8, 1.7, 8.9, 1.2, 2.1, 4.0, 6.5, 7.2, 7.3, 8.4, 8.9, 6.7, 9.2, 2.8, 4.5, 6.3, 7.6, 9.7, 9.4, 8.8, 3.5, 1.1, 4.3, 3.3, 3.1, 1.3

stemgraphic.stem_graphic(time, scale=1)
```

Out[2]:

(<Figure size 750x300 with 1 Axes>, <Axes: >)




In [3]:

```
# 연습문제 8.1, p43
from statistics import *

time = [5.9, 5.3, 1.6, 7.4, 9.8, 1.7, 8.9, 1.2, 2.1, 4.0, 6.5, 7.2, 7.3, 8.4, 8.9, 6.7, 9.2, 2.8, 4.5, 6.3, 7.6, 9.7, 9.4, 8.8, 3.5, 1.1, 4.3, 3.3, 3.1, 1.3

print("평균:", mean(time))
print("중위수(중앙값):", median(time))
print("최빈수(최빈값):", mode(time))
```

```
평균: 5.523809523809524
중위수(중앙값): 6.1
최빈수(최빈값): 1.6
```

In [14]:

```
# 연습문제 8.2, p43
from statistics import *

time = [5.9, 5.3, 1.6, 7.4, 9.8, 1.7, 8.9, 1.2, 2.1, 4.0, 6.5, 7.2, 7.3, 8.4, 8.9, 6.7, 9.2, 2.8, 4.5, 6.3, 7.6, 9.7, 9.4, 8.8, 3.5, 1.1, 4.3, 3.3, 3.1, 1.3

print("범위:", max(time) - min(time))
print("표준편차:", stdev(time))
```

```
범위: 8.700000000000001
표준편차: 2.863036893844863
```

In [19]:

```
# 연습문제 8.3, p43
import matplotlib.pyplot as plt
import numpy as np


time = [5.9, 5.3, 1.6, 7.4, 9.8, 1.7, 8.9, 1.2, 2.1, 4.0, 6.5, 7.2, 7.3, 8.4, 8.9, 6.7, 9.2, 2.8, 4.5, 6.3, 7.6, 9.7, 9.4, 8.8, 3.5, 1.1, 4.3, 3.3, 3.1, 1.3

plt.style.use('default')
# 플롯 스타일 설정

plt.rcParams['font.size'] = 12
# 폰트 사이즈 지정

fig, ax = plt.subplots()
# 서브플롯 할당

ax.boxplot([time], notch=False, whis=2, vert=False)
# 박스플롯 생성

ax.set_xlim(-10.0, 10.0)
ax.set_xlabel('Pass Time')

plt.show()
```