In [ ]:
```
#This is to verify that Python works properly on your computer.
import platform
print(platform.python_version())
```

```
3.9.13
```

In [ ]:
```
# Generate a list of random numbers using random module in Python
import random
random_lst = []

for i in range (1, 50):
    random_lst.append(random.randint(0,200))

print(random_lst)
```

```
[150, 121, 145, 184, 131, 33, 46, 91, 138, 160, 93, 41, 38, 167, 109, 149, 110, 77,
172, 153, 75, 89, 71, 109, 9, 168, 121, 9, 125, 107, 125, 189, 175, 10, 101, 27, 11
8, 122, 151, 125, 134, 8, 155, 115, 97, 82, 105, 155, 10]
```

In [ ]:
```
#Calculate the mean value for the list by looping through its element
res1 = 0

for i in random_lst:
    res1 += i
mean = res1 / len(random_lst)
print(mean)
```

```
106.0204081632653
```

In [ ]:
```
#Double check the mean
sum_lst = sum(random_lst)
mean2 = sum_lst / len(random_lst)
print(mean2)
```

```
106.0204081632653
```

In [ ]:
```
#Calculate the variance of the list
top = 0

for i in random_lst:
    top += pow(i-mean, 2)

bottom = len(random_lst)-1

variance = top/bottom
print(variance)
```

```
2638.770408163266
```

In [ ]:
```
#Double check the variance of the list
import statistics
print(statistics.variance(random_lst))
```

```
2638.770408163265
```