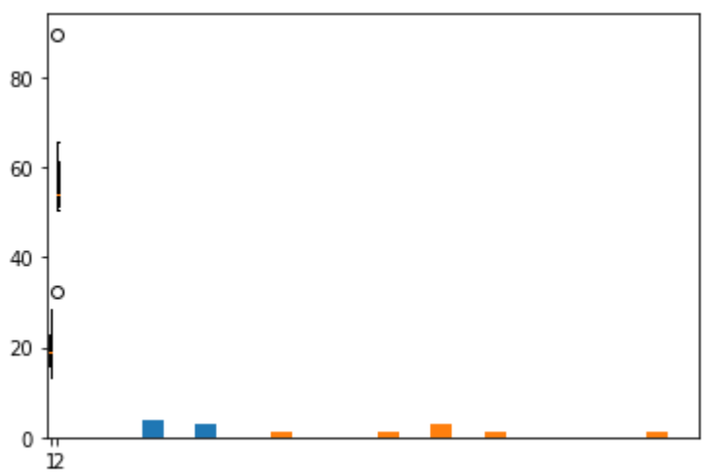
In [7]:

```
import numpy as np

import pandas as pd


import scipy.stats as stats

import matplotlib.pyplot as plt

import statsmodels.api as sm


from scipy.stats import f_oneway

from scipy.stats import chi2_contingency

from statsmodels.formula.api import ols

data=pd.read_excel("C:/Users/ELCOT/Documents/dettol worldwide sales data 2.xlsx")
data.columns=("Before_LD(2012-2018)","After_LD(2019-2025)")
data.head()

plt.boxplot(data)
plt.hist(data)

data.isnull().sum()
print(data["Before_LD(2012-2018)"].unique())
p = 0.95

alpha = 1.0 - p


print('The alpha/significance level = %.3f' % alpha)

print('The p-value is = %.2f' % p)
if p <= alpha:
    print('Reject the Null Hypothesis (Reject H0)')

else:
    print('Accept the Null Hypothesis (Do not reject H0)')
```

```
[13.174  15.075  17.1259 18.8358 21.3686 24.4977 28.24  ]
The alpha/significance level = 0.050
The p-value is = 0.95
Accept the Null Hypothesis (Do not reject H0)
```



In [ ]: