Assignment 1
Question 1:

a) The frequency table for the cipher message is:

```
('j', 0.0)
('p', 0.0)
('b', 0.0026954177897574125)
('m', 0.0026954177897574125)
('c', 0.01078167115902965)
('d', 0.01078167115902965)
('a', 0.013477088948787063)
('v', 0.013477088948787063)
('n', 0.016172506738544475)
('y', 0.016172506738544475)
('w', 0.018867924528301886)
('u', 0.0215633423180593)
('x', 0.02425876010781671)
('i', 0.026954177897574125)
('h', 0.03234501347708895)
('r', 0.03773584905660377)
('s', 0.03773584905660377)
('e', 0.05929919137466307)
('l', 0.0646900269541779)
('g', 0.07277628032345014)
('q', 0.07547169811320754)
('k', 0.07816711590296496)
('f', 0.08355795148247978)
('o', 0.08355795148247978)
('z', 0.09164420485175202)
('t', 0.10512129380053908)
```

The work is shown in the function named “part_a”

b) The deciphered message is: “blockchain is a decentralized and distributed digital ledger technology that enables secure, transparent, and tamper resistant record keeping of transactions across a network of computers it serves as the underlying technology for various cryptocurrencies with bitcoin being the first and most well- known application however, the potential applications of blockchain extend far beyond cryptocurrencies impacting various industries”

This was done using frequency analysis and guess, the work is shown in the function named “part_b”

Question 2:
Both methods are implemented in the file named a1.py