

```
1 % NAME: ADITYA BARMAN
2 % ROLL: 002320601024
3 % PROBLEM 3. Variance without Frequency
4
5
6 clc, clearvars, close all
7
8 weights_pounds = [122, 173, 179, 176, 159, 175, 160, 102, 133
9 159, 176, 151, 115, 105, 72, 170, 128, 112
10 101, 123, 117, 93, 117, 99, 90, 113, 128
11 129, 134, 178, 105, 107, 147, 157, 155, 95
12 177, 98, 174, 135, 97, 168, 160, 144, 174];
13
14 sum_wts_pds = 0;
15
16 for i = 1:5
17     for j = 1:9
18         sum_wts_pds = (sum_wts_pds + weights_pounds(i, j));
19     end
20 end
21
22 mean_weight = (sum_wts_pds/45);
23
24 sum_dist_mean = 0;
25
26 for x = 1:5
27     for y = 1:9
28         dist_mean = ((weights_pounds(x, y) - mean_weight)^2);
29         sum_dist_mean = (sum_dist_mean + dist_mean);
30     end
31 end
32
33 variance = (sum_dist_mean/45);
34 fprintf('Variance of the data is: %.4f\n', variance);
35
36
37 % ===== OUTPUT =====
38
39 % Variance of the data is: 930.7980
40
41 % =====
```

