1. A set of data involving four tropical feed stuffs A, B, C, D tried on 20 chicks is given below. All the twenty chicks are treated alike in all respects except the feeding treatments and each feeding treatments and each feeding treatment is given to 5 chicks. Weight gain of baby chicks fed on different feeding materials composed of tropical feed stuffs is given below,

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Feed** | **Gain in Weight** | | | | |
| A | 55 | 49 | 42 | 21 | 52 |
| B | 61 | 112 | 30 | 89 | 63 |
| C | 42 | 97 | 81 | 95 | 92 |
| D | 169 | 137 | 169 | 85 | 154 |

Test whether there is any difference in weight due to the four tropical feed stuff using R programming.

2. The following data represent the number of units of production per day turned out by different workers using 4 different types of machines.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | **Machine Types** | | | |
|  |  | **A** | **B** | **C** | **D** |
| **Workers** | **1** | 44 | 38 | 47 | 36 |
| **2** | 46 | 40 | 52 | 43 |
| **3** | 34 | 36 | 44 | 32 |
| **4** | 43 | 38 | 46 | 33 |
| **5** | 38 | 42 | 49 | 39 |

a) Test whether the five men differ with respect to mean productivity and

b) Test whether the mean productivity is the same for the four different machines types. Using R