**R-Practical**

1. Before Halloween two bags of miniature Clark bars were purchased and each bar was weighed (in grams), 19 in the first bag and 23 in the second bag, yielding the following weights;

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 19.8 | 20.3 | 20.2 | 19.6 | 20.0 | 19.4 | 15.4 | 19.9 | 20.5 | 20.5 | 19.8 |
| 15.5 | 21.8 | 20.0 | 15.4 | 20.6 | 15.7 | 20.4 | 21.3 | 16.7 | 15.6 | 14.2 |
| 15.9 | 16.8 | 15.2 | 15.0 | 16.0 | 16.4 | 15.4 | 16.0 | 16.1 | 17.0 | 16.0 |
| 15.1 | 14.1 | 15.8 | 15.7 | 16.6 | 15.2 | 15.5 | 14.9 | 15.3 |  |  |

1. Group these weights using as class boundaries 13.95-14.95, 14.95-15.95 and so on and construct a relative frequency histogram.
2. Calculate the values of the sample mean and sample standard deviation .
3. Locate on your histogram .
4. Give an interpretation about the distribution of the data.
5. If X is b(100, 0.1), find the approximate value of using
6. The Poisson approximation
7. The binomial
8. Normal Distribution

Compare the three values.