## Creative Coding 2

## Frequency Distributions and Histograms

1. **Simple Frequency Distributions:**

**Question 1:**

Using the data for the number days missed by 42 workers given in ‘creative coding 2 (histograms), compile (i) a simple frequency distribution for the data, and (ii) the relevant histogram.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | 1 | 3 | 2 | 0 | 2 | 0 |
| 5 | 2 | 4 | 0 | 0 | 2 | 4 |
| 3 | 0 | 0 | 2 | 1 | 3 | 6 |
| 2 | 2 | 2 | 1 | 0 | 0 | 1 |
| 2 | 1 | 2 | 3 | 2 | 2 | 1 |
| 1 | 2 | 0 | 4 | 3 | 0 | 3 |

**Hint:** When working out what the frequency represents (for your column headings), just look at what each cell represents. For example, in question 1, each cell represents a worker, therefore the frequency represents the number of workers, and should total to 42 (number of cells). The value contained within each cell represents the results of the study in question – for example, number of days missed.

**Question 2:**

A large furniture removal company charts the availability of its vans on a daily basis. The following data give the number of vans not available for all or part of a day, each working day over a sixty day period:

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 1 | 4 | 2 | 0 | 1 | 0 | 0 | 2 | 1 | 1 | 1 | 0 | 0 | 2 | 3 | 5 | 2 | 2 | 1 |
| 3 | 6 | 3 | 1 | 0 | 1 | 1 | 1 | 0 | 2 | 2 | 1 | 3 | 2 | 1 | 0 | 1 | 3 | 5 | 5 |
| 8 | 3 | 1 | 1 | 3 | 2 | 2 | 0 | 1 | 3 | 1 | 1 | 0 | 0 | 0 | 1 | 3 | 2 | 4 | 1 |

Compile (i) a simple frequency distribution and (ii) the associated histogram.

1. **Grouped Frequency Distributions:**

**Question 1:**

Work through the ‘number of miles travelled recorded by 80 different sales people’ example in ‘creative coding 2 (histograms) to construct the grouped frequency distribution, and associated histogram.

**Question 2:**

Compile a Grouped Frequency Distribution for the recorded overtime (rounded to hours) of 40 employees in a factory over a particular month.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 24 | 13 | 28 | 15 | 25 | 29 | 15 | 46 |
| 9 | 10 | 17 | 22 | 23 | 17 | 16 | 32 |
| 11 | 12 | 18 | 20 | 13 | 27 | 18 | 22 |
| 20 | 14 | 26 | 14 | 19 | 19 | 40 | 31 |
| 17 | 21 | 23 | 26 | 18 | 24 | 21 | 27 |

Create the associated Histogram.