Part 1:

Used lib: *csv – random – nympy - typing*

Generate_means_and_stds generates 6 random means and standard deviations using "np.random.uniform". The means are generated using a uniform distribution with a low of 0.0 and a high of 5.0, while the standard deviations are generated using a uniform distribution with a low of 0.5 and a high of 2.0. The function ensures that the means and standard deviations are all different, and that at least one mean is close to 2.5.

Generate_data generates a numpy array of size n_points x 6, where n_points is 300 by default. The data is generated using 6 normal distributions, each with its own mean and standard deviation. The first column is rounded to contain integers, the second column has 0.5 added to it to contain floats, and the remaining columns are generated with positive, negative and near-zero correlations.

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Part 2: