Fundamentals of Data Science

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The project displays a dataset of new-borns weights in specific European locations, tracked over a specific amount of time. There are about 400 entries. The given information is utilised to determine the value of X, where X should be chosen so that 75% of new-borns from the distribution have birthweights greater than X.

Finding the product of each value with its probability and then calculating the sum of all possible values allows us to get the mean weight of the given data. We start by computing the absolute difference between the cumulative sum and 25% (100% - 75%) of babies in order to calculate the value of X. The mean of a normal distribution is

$\mu = \sum xi * pi$, Where xi is the value of each observation, pi is the corresponding probability of that observation occurring, and the summation is taken over all possible values of X.

Thus, the mean is 3.481015625, and the value of X is 3.125.