Alarms are useful for monitoring metrics and setting up threshold to take action.

1) Service or application publishes metrics data at a specific frequency; usually every 1 minute or 5 minutes.

2) This metrics data is typically summarized over a time window aka Time Period to spot a trend. Each summarized data is a data point. Summarization could be average, count of errors, 90th percentile and so on. Time period could be 5 minutes or 15 minutes and so on.

3) Using Alarms, data points are monitored over several time periods (known as alarm evaluation interval) to detect persistent issues and to rule out temporary issues that resolve automatically (for example a temporary spike in load observed during one time period).

You can configure alarms in two ways:
A. Consecutive data points need to stay above threshold. If alarm evaluation interval is 3 time periods, then 3 consecutive data points need to be above the threshold

B. M out of N consecutive data points need to stay above threshold. If M=3 and N=3, then it is same as (A). If M=2 and N=3, then alarm will trigger even if only 2 data points are above the threshold out of three consecutive data points.