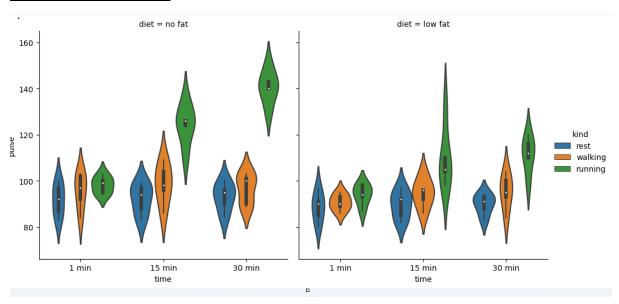
Factor plot Interpretation:



Axes and Labels:

- **Y-axis**: Represents the pulse rate.
- **X-axis**: Represents the time intervals at which the pulse rate was measured (1 min, 15 min, 30 min).
- **Panels**: The left panel shows data for the "no fat" diet, and the right panel shows data for the "low fat" diet.
- **Legend**: Indicates the kind of activity (rest, walking, running), represented by different colors (blue for rest, orange for walking, and green for running).

Interpretation:

- **Violin Plots**: Each violin plot represents the distribution of pulse rates for a specific combination of diet, time, and activity. The width of each "violin" indicates the density of the data points at different pulse rates.
- **Black Dots and Bars**: The black dots indicate the median pulse rate, and the black bars represent the interquartile range (IQR).

Observations:

- 1. **Diet = No Fat**:
 - **Rest**: Pulse rates are relatively stable across all time intervals with slight variations
 - Walking: Pulse rates show a similar trend, slightly increasing with time.
 - o **Running**: Pulse rates are noticeably higher compared to rest and walking, increasing significantly with time.
- 2. $\mathbf{Diet} = \mathbf{Low} \ \mathbf{Fat}$:

- o **Rest**: Similar to the no-fat diet, pulse rates remain stable across time intervals.
- **Walking**: Pulse rates slightly increase with time, comparable to the no-fat diet
- o **Running**: Pulse rates are significantly higher, especially noticeable at 15 minutes, with a peak at 30 minutes.

Summary:

- Pulse rates are generally higher during running compared to rest and walking for both diets.
- Running shows a significant increase in pulse rate over time, more pronounced in the low-fat diet panel.
- Pulse rates during rest and walking are relatively stable and show minor increases over time for both diets.