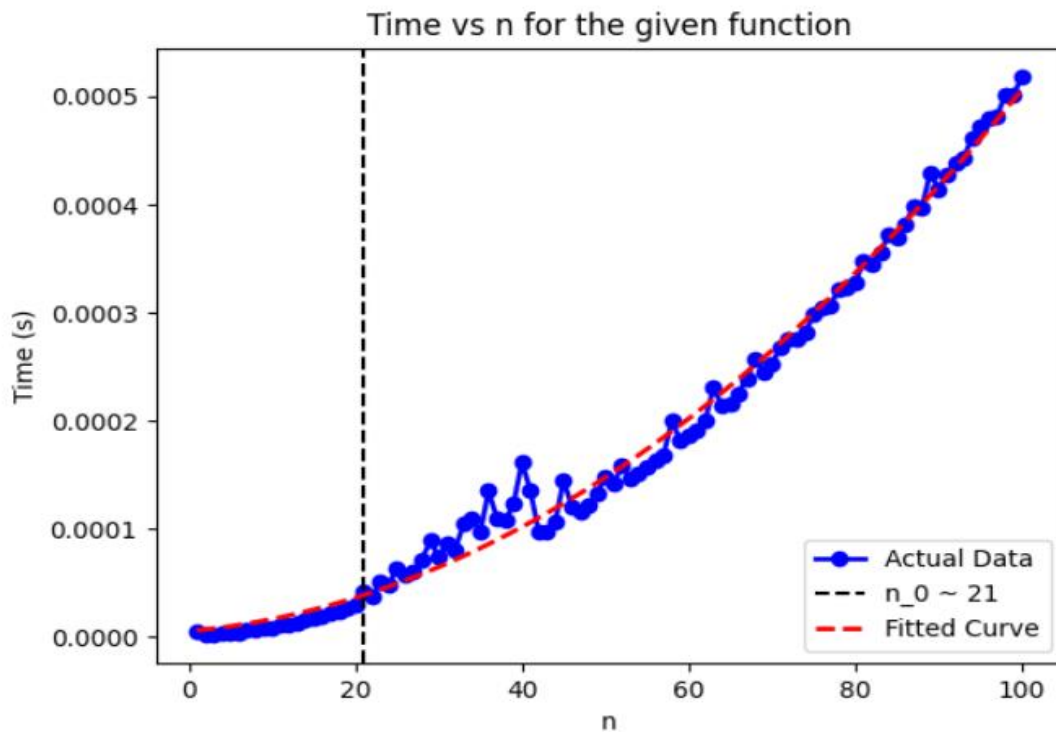


4. Find the approximate (eye ball it) location of " n_0 ". Do this by zooming in on your plot and indicating on the plot where n_0 is and why you picked this value. Hint: I should see data that does not follow the trend of the polynomial you determined in #2.



1. **Explanation:**

- In this specific case, you might have observed (By eye ball) that up to $n=20$, the runtime follows a trend close to linear (perhaps influenced by the linear term n in the polynomial fit).
- Beyond $n=20$, there is a more significant deviation from this linear trend.

2. **Reason for Picking 21:**

- I chose $n_0=21$ because, at this input size, there is a noticeable shift in the behavior of the runtime data.
- The observed deviation from the polynomial trend becomes more evident, indicating that beyond n_0 , the quadratic term is deviating influential.