Scenario 1: Task 1 Medical Time Series (Readmission)

In the medical industry, readmission of patients is such a problem that the Centers for Medicare and Medicaid Services (CMS) penalizes hospitals for excessive readmissions. When it comes to readmission penalties, studies show that many hospitals are overconfident and underprepared. The percentage of hospitals penalized for readmissions has increased each year since CMS began imposing penalties, reaching a high of 78% for fiscal year 2015. However, three-quarters of hospitals feel confident in their ability to reduce readmissions, and only 55% of them anticipate receiving a penalty this fiscal year. Given the historical trend the percentage of hospitals penalized will likely be much higher than 55%. Additionally, although hospitals are applying various reduction strategies, fewer than 1 in 5 use technology that is specific to reducing their readmissions, so they may not be doing all that they can.

As part of the "readmission" project, executives would like to see consider a time series on revenue from the first years of operation. Once they understand any patterns in that data, they feel confident in understanding the impact of readmission in current times. The given time series data records the daily revenue, in million dollars, during the first two years of operation.

Data File being used:
medical_time_series.csv

Data Dictionary:
The data set consists of 731 rows (days) and two columns or variables:
- **Day:** Day during first two years of operation
- **Revenue:** Revenue in million dollars