Assignment

Question:

Our team works across verticals and is responsible for data, infrastructure, and analysis.

This data is from the IT industry where the client is dealing with services to customers after purchasing a product. This means the client deals with data regarding tech support, warranties, repairs, etc. For this assessment, we are interested in seeing some of your data skills and your thought process around making sense of this kind of data.

Please automate the report such that it gets updated every month.

Data:

Zip file: GSPE_DE_dataset.zip

Data dictionary

- Asst_id – an identifier for each individual machine sold
- Product_type – class of product that describes the asset
- Region – region where the asset is located
- Country – country where the asset is located
- Mnfcture_wk – week when product was manufactured
- Contract_st – week when warranty became active
- Contract_end – week when warranty expires
- Contact_wk – week when customer contacted Dell about a problem
- Contact_type – way that customer contacted Dell
- Issue_type – type of problem identified by customer
- Topic_category – type of problem as classified by the tech support agent
- Parts_sent – what parts were sent to fix the problem
- Repair_type – if a part was required, this is a hard repair; otherwise, a soft repair
- Repeat_ct – how many additional visits were required to fix the problem, past the first one
- Parts_ct – how many parts were sent to fix the problem
- Agent_tenure_indays – how long the tech support agent has worked in Dell tech support
- Contact_manager_flg – did the tech support agent have to bring in a manager to solve the problem
- Diagnostics – were agents compliant with diagnostic usage
- Repeat_parts_sent – which parts were sent on additional visit

The objective of this assignment is to evaluate the candidates on the following skillsets:

- Python coding / R coding
- Making sense of the data
- Thought process / presentation

The submission should include:

- Python code / R code
- Presentation on the steps followed
- Summary of the final results