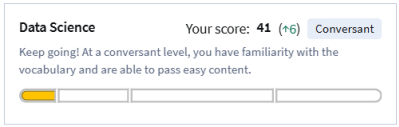
Your grade: 100%

Your latest: **100%** • Your highest: **100%** • To pass you need at least 66%. We keep your highest score.

Next item →

You increased your skill score!



1. You are a new data scientist. You have been tasked with coming up with a solution for reducing traffic congestion and improving transportation efficiency. How would you go about it? — 1 / 1 point

- ○ Suggest implementation of surge charges for ride-sharing services.
- ○ Suggest creating more parking lots and garages in the city
- ◉ Gather and analyze streetcar operations data and identify congested routes
- ○ Suggest implementation of strict speed limits and traffic fines

Correct
Correct! By doing this you would be using data science to reduce traffic congestion and improve transportation efficiency in a city.

2. Imagine you take a taxi ride where the initial fare is a fixed amount, and the fare increases based on both the distance traveled and the time spent in traffic. Which concept in data analysis does this scenario closely resemble? — 1 / 1 point

- ○ Unstructured data extraction
- ◉ Regression analysis
- ○ Data visualization with R
- ○ Nearest neighbor algorithm

Correct
Correct! The scenario of a taxi ride with a fixed base fare and additional charges based on distance and time is analogous to regression analysis, where a constant and relationships between variables are determined.

3. You have to pick a file format which meets the following conditions: a) is self-descriptive for internet-based information sharing b) readable by both humans and machines c) Facilitates easy data sharing between different systems. Which file format would you pick? — 1 / 1 point

- ○ Microsoft Excel Open XML Spreadsheet (XLSX)
- ○ Delimited text file formats (CSV/TSV)
- ◉ Extensible Markup Language (XML)
- ○ JavaScript Object Notation (JSON)

Correct
Correct! XML is a markup language with defined rules for encoding data, making it self-descriptive, readable by both humans and machines, and suitable for data sharing between diverse systems.