

Detecting Data Types in Unemployment Dataset

The screenshot shows a web-based learning interface. At the top, there's a navigation bar with 'Learn / Courses / Exploratory Data Analysis in Python' and a 'Course Outline' button. A 'Daily XP 150' indicator is also present. The main content area is divided into two panels. The left panel, titled 'Exercise', contains the following text: 'Detecting data types', 'A column has been changed in the `unemployment` DataFrame and it now has the wrong data type! This data type will stop you from performing effective exploration and analysis, so your task is to identify which column has the wrong data type and then fix it.', and 'pandas has been imported as `pd`; `unemployment` is also available.' Below this, it says 'Instructions 1/2' with a '90 XP' badge and a progress indicator '1 / 2'. The 'Question' section asks 'Which of the columns below requires an update to its data type?'. Under 'Possible answers', there are four radio buttons: 'country_name' (selected), 'continent', '2019', and '2021'. A 'Submit Answer' button is at the bottom right of the question panel. A 'Take Hint (-15 XP)' button is at the bottom left. The right panel is a code editor titled 'script.py' with a 'Light Mode' toggle. It shows a single line of code: '1'. Below the code editor is an 'iPython Shell' section with a 'Slides' tab and a 'Run Code' button. The shell shows 'In [1]:' followed by a blank line.

Question:

A column has been changed in the `unemployment` DataFrame and it now has the wrong data type! This data type will stop you from performing effective exploration and analysis, so your task is to identify which column has the wrong data type and then fix it.

Task:

Which of the columns below requires an update to its data type?

Explanation of the Question:

The task requires identifying and correcting a column with an incorrect data type in a DataFrame. Such errors can hinder accurate analysis, summarization, and visualizations, emphasizing the need for appropriate data type adjustments.

Answer:

The column `2019` requires updating its data type.

Explanation of the Answer:

The `2019` column, expected to hold numeric unemployment data, might have been mistakenly set to a non-numeric type, such as a string or object. This would disrupt calculations and summarizations, so ensuring it is numeric resolves the issue.