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| Data Science Academy Bootcamp | | | | | | | | |
| Midterm exam | | | | | | | | |
| **Name, Surname: Şahin Məmmədov** |  | |  | | Date: 09.25.2022 | |  | |
| **Exam:** Data visualization with Tableau | |  | |  | |  | | | |
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| **Instructions:** You will be given ***1 hour*** to complete examination. There are 2 parts and 3 types of questions including: True/False, Multiple choice and Practical.  **First part** will last ***15 minutes****,* and you must write answers on exam paper. Internet search is **not** permitted.  **Second part** is Practical questions and will last ***45 minutes***. It is your responsibility to submit your exam answers electronically to [homework@dsa.az](mailto:homework@dsa.az) with **“Tableau Exam”** subject.  Before you leave the examination venue you **MUST** contact mentor to confirm that you have submitted your answers.  Good Luck!   |  |  |  | | --- | --- | --- | |  | | | | PART 2: TRUE/FALSE | | | | **Directions: Read each statement below carefully. Place a** Checkmark **on the “True” cell if you think a statement is TRUE, and on the “False” cell if you think the statement is FALSE.** | | | |  | | | |  | True | False | | 1. Companies with high expenses generate lower profit. (6 points) | + |  | | 2. IT industry has the highest profit share in top 3 States by profit. (6 points) | + |  | | | | | | | | | |
| PART 2: Practical | | | | | | | |
| **Directions: Read each question carefully, and provide answers in complete sentences.** | | | | | | | |
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| “Future 500” dataset contains 500 financial records of companies belonging to six different classes of industries. It has 500 rows and 11 columns with company name, its belonging industry, date of inception, number of employees work, established state and city, profit and growth by previous year.  Answer following questions:   1. In which state is the company with highest growth rate located? - (4 points) CA 2. In which inception year do the companies have highest average profit? (6 points) 2003 3. In which 3 states do companies have higher profits? (6 points) VA, TX, CA 4. In which part of the country are most of those companies located in? (8 points) CA | | | | | | | |
| PART 2: Practical |
| **Directions: Read each point carefully, build dashboard and send responses as twb or twbx file.** |
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| Create reader friendly dashboard includes:   1. Map of states by profit and use map as a filter. (8 points) 2. Donut chart shows portions of each industry in total profit. (10 points) 3. Lollipop chart illustrates companies by its profit. (8 points) 4. Labels and Titles for each graph (6 points) |
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