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Health Data Science Chapter 4 Questions

1. What is the difference between a spreadsheet and a database?
    a. A spreadsheet provides a user-friendly interface for data entry and manipulation, whereas a database can handle larger and more complex datasets.
2. What are the advantages and disadvantages of using a spreadsheet for health data management?
    a. They are simple and user-friendly, but limited in data capacity, performance, and data integrity controls.
3. What are the advantages and disadvantages of using a database for health data management?
    a. They can store vast amounts of data, maintain data integrity, and provide tools for data querying and reporting. However, they are more complex and difficult to use.
4. What are some examples of tasks that can be performed using a spreadsheet?
    a. Organizing data in rows and columns, performing calculations, creating charts, and applying various data analysis tools.
5. What are some examples of tasks that can be performed using a database?
    a. Storing vast amounts of data, maintaining data integrity, and providing powerful tools for data querying and reporting.
6. What are some examples of tasks that can be performed using both a spreadsheet and a database?
    a. Storing/retrieving/manipulating data, data analysis, data visualization.
7. What are some examples of tasks that can be performed using neither a spreadsheet nor a database?
    a. Anything that doesn't have to do with data management/storage/visualization.
8. What are some examples of tasks that can be performed using a spreadsheet but not a database?
    a. Spreadsheets can be used for many non-data science tasks, like keeping track of finances, and are very useful for everyday people.
9. What are some examples of tasks that can be performed using a database but not a spreadsheet?
    a. Managing larger and more complex data sets and maintaining data integrity.
10. What are some examples of tasks that can be performed using both a spreadsheet and a database?
    a. Storing/retrieving/manipulating data, data analysis, data visualization.