1.What is data analysis?

a) the process of cleaning, changing, and processing raw data and extracting actionable, relevant information that helps businesses make informed decisions data analysis can be seen whenever we make a decision in our daily lives by evaluating what has happened in the past or what will happen if we make that decision. Basically, this is the process of analyzing the past or future and making a decision based on that analysis.

2.What are the tools useful for data analysis?

a)Currently mostly used tools are tableau,power bi for visualisation and r programming and python and pandas and sql are the most commonly used tools in analysis.

3.what are the various steps involved in any analytics project?

a) 1.deployment:data is deploy from the source

2.Business understanding:we need to understand the purpose of the business

3.data exploration: Data exploration, also known as exploratory data analysis (EDA), provides a set of simple tools to achieve a basic understanding of the data.

4.data preparation: Data preparation is the process of cleaning, standardizing and enriching raw data to make it ready for use in analytics and data science.

5.data modelling: Data modeling is the process of creating a visual representation of either a whole information system or parts of it to communicate connections between data points and structures.

6.data evalution: The data evaluation takes place via Thingspeak, for example. Later on, we want to completely outsource the logic into our own web server, in order to send less data to the evaluating and visualizing app and to realize further advantages

4.Whar are the responsibilities of a data analyst?

A) Data Analyst’s responsibilities are the extraction of the data from data warehouses and preparing it for analysis. At first, the extracted data is in the raw form, on which operations such as manipulation and visualization will yield inconsistent results. To make the data structured, Data Analysts perform various techniques to make it ready for use. You can see the below image that shows the form of well-organized and structured data.

* Classifying data as per rows and columns
* Removing redundant and non-essential rows and columns
* Eliminating null values
* Categorizing the values of columns according to data types (e.g., male, female, true, false, etc.)
* Converting the data into a readable format

5.what are the some skills usually required for a data analyst?

a) some of the top skills for data analysts to acquire for success in their field:

1. SQL
2. Spreadsheets
3. Critical Thinking
4. Statistical programming languages
5. Data visualization
6. Public speaking
7. Machine learning
8. Data warehousing
9. Communication
10. Problem-solving
11. Research
12. Attention to detail
13. Collaboration
14. Project management
15. Data prep
16. Statistics
17. Writing
18. Domain knowledge

6.What are the difference between data analystics and data science?

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| Data analysts | Data science |
| A data analysts role is related to data cleaning,transforming,and generating inference from data. | A data scientist deals with various data operations |
| Involvment is limit to small data and static inferences | Involved with several underlaying data procedures |
| Deals with structed data only | Handles structed and unstructed data |
| Has to be problem sloving skills and knowledge of basic concepts | Possesses knowledge of mathematics,statics,machine learning |
| Knows sql,excel,r programming,tableau | Proficient in sas,python,R,tensorflow,Hadoop,spark |