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Q. Write any 3 application of Data Science
& explain in Detail.

⇒ ① Healthcare & medical Diagnosis

Applications in Healthcare =

• Disease prediction & early Detection =
AI models analyze patient history,
genetics, and lifestyle to predict
diseases like cancer, diabetes, and
heart diseases.

• medical imaging Analysis = AI-powered
image recognition helps doctors
detect abnormalities in x-rays, MRIS,
and CT Scans with high accuracy.

② Fraud Detection in Banking & Finance

• Fraud Detection = AI monitors
banking transactions and flags
unusual patterns, reducing fraudful
emt activities like credit card.

③ E-commerce & Retail Analytics.

• Inventory management =
predictive analytics helps retailer
manage stock levels, reducing
overstocking and shortages.

Q. mention Libraries of Python for mathematical operatn, array/Lists, is draw the graph, chart etc.

⇒ ① mathematical operations :-
- NUMPY
- SCIPY
- SYMPY
- math
- statistics

② Arrays and Lists Handling
- Numpy
- Pandas
- array (Built-in module)

③ Graphs and charts (Data visualization)
- matplotlib
- Seaborn
- Plotly
- Bokeh
- ggplot (plotnine)

Some extra Library functions are :-
- scikit → learn for ML
- Tensorflow & Py Torch → deep Learning
- Stats models → statistical modelling.