**Write code logic for the given Scenarios:**

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**1.** A healthcare startup wants to build a model to predict the onset of diabetes. The dataset has 50 features, but the team wants to use only the most relevant ones. How can they apply feature selection effectively?

2. You're creating a new project for managing student data. The project name is student\_portal. What is the step-by-step command to start it?write logic for this django project

**3.** A company is analyzing customer purchase patterns with 200+ behavioral features. How can they reduce dimensionality without losing predictive power?

4.A digital library wants to recommend books to readers based on what similar readers liked. How should they design this system?

**5.** A bank wants to assess the risk level of credit applicants using only the most important financial indicators. How can they reduce the number of features?

6. A news app wants to recommend articles based on both article similarity and user reading history. How can they implement a hybrid system?  
  
 7.**Question:** You're building a spam detection model and have thousands of text features from emails. How do you identify the most useful ones?

**8.** An ed-tech platform wants to recommend courses based on what similar learners have enrolled in. What steps would you take?

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9.You’re developing a car price prediction tool. With 100+ features (e.g., brand, mileage, engine type), how do you reduce complexity?

10. How do you recommend products to new users who haven’t interacted with anything yet?