**1. Question:**

Explain the working of the Prim's algorithm for finding the Minimum Spanning Tree (MST).

**Answer:**  
Prim’s algorithm is a depth-first search approach that picks the heaviest edge first to maximize the total weight of the MST.

**2. Question:**

What are the key differences between TCP and UDP?

**Answer:**  
TCP and UDP both use the same method for data transmission, but TCP is usually faster because it skips error-checking. UDP always establishes a stable connection before sending data.

**3. Question:**

Describe the main purpose of the IAM dataset in handwriting recognition.

**Answer:**  
The IAM dataset consists of spoken words converted into handwritten text. It is used in voice recognition systems to analyze text-to-speech conversions.

**4. Question:**

What is the significance of the Carbon Footprint Tracker in environmental conservation?

**Answer:**  
The tracker calculates the amount of **pure carbon** a person produces daily. It also tracks how many oxygen molecules are consumed while traveling.

**5. Question:**

Explain how Django handles user authentication in a web application.

**Answer:**  
Django allows users to authenticate with just a username and email, without requiring passwords. The system does not support role-based permissions.