```
In [ ]: | n = input("Enter a number: ")
        if n == n[::-1]:
             print("This is a palindrome: ")
             print("This is not palindrome: ")
In [ ]: !pip install pymongo
In [ ]: | from pymongo import MongoClient
         # Connect to MongoDB (Ensure MongoDB is running)
         client = MongoClient("mongodb://localhost:27017")
         # Create/select a database
         db = client["Mani_database"]
         # Create/select a collection (like a table)
         collection = db["my_collection"]
         print("Connected to MongoDB successfully!")
In [ ]: |# Insert multiple records
         users = [
             {"name": "Alice", "age": 25, "city": "Los Angeles"},
             {"name": "John", "age": 28, "city": "Chicago"}, {"name": "Emma", "age": 22, "city": "Houston"},
             {"name": "David", "age": 35, "city": "Miami"}
         ]
         collection.insert_many(users)
         print("Multiple documents inserted successfully!")
In [ ]: | client.list_database_names()
In [ ]: | db.client.learn
In [ ]: db.list_collection_names()
In [ ]: |client.list_database_names()
```

```
In [ ]: | data = {
            "name": "Mani",
            "age": 23,
            "city": "Nagpur"
        insert_result = collection.insert_one(data)
        print("Inserted ID:", insert_result.inserted_id)
        # Insert multiple documents (similar to inserting multiple rows)
        data_list = [
            {"name": "Alice", "age": 25, "city": "Mumbai"},
            {"name": "Bob", "age": 28, "city": "Delhi"},
            {"name": "Charlie", "age": 35, "city": "Bangalore"}
        insert_many_result = collection.insert_many(data_list)
        print("Inserted IDs:", insert_many_result.inserted_ids)
        # Confirm insertion by fetching all records
        print("All records in 'tables' collection:")
        for doc in collection.find():
            print(doc)
In [ ]: | db.tables.count_documents({})
In [ ]: | cursor = db.tables.find({})
In [ ]: | for doc in cursor:
            print(doc)
In [ ]: data = {
            "name": "Mani",
            "age": 23,
            "city": "Nagpur"
        insert_result = collection.insert_one(data)
        print("Inserted ID:", insert_result.inserted_id)
In [ ]: |db.tables.count_documents({})
In [ ]: data_list = [
            {"name": "siva", "age": 25, "city": "Mumbai"},
            {"name": "jagadessh", "age": 29, "city": "Delhi"},
            {"name": "Ganesh", "age": 22, "city": "Bangalore"}
        insert_many_result = collection.insert_many(data_list)
        print("Inserted IDs:", insert_many_result.inserted_ids)
In [ ]: |db.tables.count_documents({})
```

```
In [ ]: from sklearn.feature_extraction.text import TfidfVectorizer
        import numpy as np
        from pymongo import MongoClient
        # Step 1: Connect to MongoDB
        client = MongoClient("mongodb://localhost:27017")
        db = client["plagiarism_db"]
        collection = db["documents"]
        # Step 2: Get existing texts from MongoDB
        texts = [doc["content"] for doc in collection.find()] # Fetch all stored docum
        # New input text
        new_text = "This is a sample document."
        # Step 3: Check Plagiarism using TF-IDF
        vectorizer = TfidfVectorizer()
        tfidf_matrix = vectorizer.fit_transform(texts + [new_text])
        similarity matrix = (tfidf matrix * tfidf matrix.T).toarray()
        similarity_scores = similarity_matrix[-1][:-1] # Compare new_text with stored
        # Step 4: Get Plagiarism Percentage
        max_similarity = np.max(similarity_scores) if similarity_scores.size > 0 else (
        plagiarism_percentage = round(max_similarity * 100, 2) # Convert to percentage
        print(f"Plagiarism Percentage: {plagiarism_percentage}%")
        # Step 5: Store in MongoDB if plagiarism detected (above 30%)
        if plagiarism_percentage > 30:
            collection.insert_one({"content": new_text, "plagiarism": plagiarism_percer
            print("Data stored in MongoDB.")
        else:
            print("Plagiarism below threshold. Not storing.")
```

```
In [ ]: from sklearn.feature_extraction.text import TfidfVectorizer
        import numpy as np
        from pymongo import MongoClient
        # Step 1: Connect to MongoDB
        client = MongoClient("mongodb://localhost:27017")
        db = client["plagiarism_db"]
        collection = db["documents"]
        # Step 2: Get user input text
        new_text = input("Enter text to check for plagiarism: ")
        # Step 3: Get existing texts from MongoDB
        texts = [doc["content"] for doc in collection.find()] # Fetch all stored docum
        # Step 4: Check Plagiarism using TF-IDF
        if texts: # Only run if there is existing data in DB
            vectorizer = TfidfVectorizer()
            tfidf_matrix = vectorizer.fit_transform(texts + [new_text])
            similarity_matrix = (tfidf_matrix * tfidf_matrix.T).toarray()
            similarity_scores = similarity_matrix[-1][:-1] # Compare new_text with std
            # Step 5: Get Plagiarism Percentage
            max_similarity = np.max(similarity_scores) if similarity_scores.size > 0 el
            plagiarism_percentage = round(max_similarity * 100, 2) # Convert to percer
        else:
            plagiarism_percentage = 0 # No previous data, assume 0% plagiarism
        print(f"Plagiarism Percentage: {plagiarism percentage}%")
        # Step 6: Store Data in MongoDB (Always store, even if plagiarism is 0%)
        data_to_store = {"content": new_text, "plagiarism": plagiarism_percentage}
        collection.insert_one(data_to_store)
        print("Data stored in MongoDB:", data_to_store)
In [ ]: pip install flask pymongo flask-cors
In [ ]: from flask import Flask, request, jsonify
        from flask cors import CORS
        from pymongo import MongoClient
        import nest_asyncio
In [ ]: nest_asyncio.apply() # Allows Flask to run in Jupyter Notebook
        app = Flask(__name__)
        CORS(app)
In [ ]: | client = MongoClient("mongodb://localhost:27017") # Connects to MongoDB
        db = client["plagiarism checker"] # Creates or accesses the database
        collection = db["docu"] # Creates or accesses the collection (table)
```

```
In [ ]: @app.route('/check_plagiarism', methods=['POST'])
        def check_plagiarism():
            data = request.json # Extract JSON data sent from frontend
            text = data.get("text") # Get the "text" field
            found = collection.find_one({"text": text}) # Check if text exists in Mong
            if found:
                return jsonify({"message": "Plagiarism detected!", "status": "plagiariz
            else:
                collection.insert_one({"text": text}) # Save the text in MongoDB
                return jsonify({"message": "No plagiarism found. Text saved!", "status"
In [ ]: | if __name__ == "__main__":
            app.run(port=5000)
```

```
In [ ]: from flask import Flask, request, jsonify
        from flask_cors import CORS
        from pymongo import MongoClient
        import nest_asyncio
        from difflib import SequenceMatcher # To calculate similarity
        nest_asyncio.apply()
        app = Flask(__name__)
        CORS(app)
        # Connect to MongoDB
        client = MongoClient("mongodb://localhost:27017/")
        db = client["plagiarism_Editor"]
        collection = db["documents_121"]
        def calculate_similarity(text1, text2):
            """Calculate similarity percentage between two texts."""
            return SequenceMatcher(None, text1, text2).ratio() * 100 # Convert to perc
        @app.route('/check_plagiarism', methods=['POST'])
        def check_plagiarism():
            data = request.json
            text = data.get("text")
            # Fetch all stored texts
            all_texts = collection.find()
            max_similarity = 0 # Store the highest similarity score
            for record in all texts:
                stored_text = record["text"]
                similarity = calculate_similarity(text, stored_text)
                max_similarity = max(max_similarity, similarity) # Keep track of max s
            if max_similarity > 0: # If some similarity is found
                return jsonify({"message": f"Plagiarism detected! Similarity: {max_simi
                                "status": "plagiarized", "percentage": max_similarity})
            else:
                collection.insert_one({"text": text}) # Store new unique text
                return jsonify({"message": "No plagiarism found. Text saved!",
                                "status": "unique", "percentage": 0})
        if __name__ == "__main__":
            app.run(port=5000)
```

```
In [ ]: from flask import Flask, request, jsonify
        from flask cors import CORS
        from pymongo import MongoClient
        import nest_asyncio
        from difflib import SequenceMatcher # For similarity percentage
        nest_asyncio.apply() # Allows Flask to run in Jupyter Notebook
        app = Flask(__name__)
        CORS(app)
        # Connect to MongoDB
        client = MongoClient("mongodb://localhost:27017/")
        db = client["plagiarism_Guru"]
        collection = db["documents_117"]
        def get_similarity(text1, text2):
            return SequenceMatcher(None, text1, text2).ratio() * 100 # Convert to perd
        @app.route('/check_plagiarism', methods=['POST'])
        def check_plagiarism():
            data = request.json
            text = data.get("text")
            # Get all stored documents
            all_texts = collection.find({})
            highest_similarity = 0
            for doc in all_texts:
                similarity = get_similarity(text, doc["text"])
                if similarity > highest_similarity:
                    highest_similarity = similarity # Store the highest similarity for
            if highest_similarity > 0: # If there's some match, return similarity perd
                return jsonify({"message": "Plagiarism detected!", "status": "plagiariz
            else:
                collection.insert_one({"text": text}) # Save text if unique
                return jsonify({"message": "No plagiarism found. Text saved!", "status"
        if __name__ == "__main__":
            app.run(port=5000)
```

```
In [ ]: from flask import Flask, request, jsonify
        from flask_cors import CORS
        app = Flask(__name__)
        CORS(app) # Allow cross-origin requests
        @app.route('/check_plagiarism', methods=['POST'])
        def check_plagiarism():
            data = request.json
            text = data.get("text", "")
            if not text.strip():
                return jsonify({"message": "No text provided", "percentage": 0.00})
            # Dummy plagiarism check logic (Replace this with actual plagiarism detecti
            import random
            plagiarism_percentage = round(random.uniform(0, 100), 2) # Generates random
            message = "Plagiarism detected!" if plagiarism_percentage > 0 else "No plag
            return jsonify({"message": message, "percentage": plagiarism_percentage})
        if __name__ == '__main__':
            app.run(debug=True)
```

```
In [ ]:
```