

database.py

```
1  from pymongo import MongoClient
2  import pandas as pd
3  from config import MONGO_URI
4
5  # Initialize MongoDB client and database
6  client = MongoClient(MONGO_URI)
7  db = client["class_mgmt"]
8  students_collection = db["students"]
9
10 def load_students_from_csv(csv_path="data/student.csv"):
11     df = pd.read_csv(csv_path)
12     records = df.to_dict(orient="records")
13     students_collection.insert_many(records)
14     return len(records)
15
16 def fetch_all_students():
17     return list(students_collection.find({}, {"_id": 0}))
18
19 def find_students_by_field(field, value):
20     query = {field: {"$regex": value, "$options": "i"}}
21     return list(students_collection.find(query, {"_id": 0}))
22
23 def get_birthdays_by_month(month_str):
24     return list(students_collection.find({"DOB": {"$regex": f"-{month_str}-", "$options": "i"}}, {"_id": 0}))
25
26
```