Task 1:

I made with django

1. Search for a school

In app schoolapp

Superuser

user: mahmoudismail

Emil: mahmoudismail9114@gmail.com

password :123456789

1. Fill in student’s information as follows:

In folder Search-for-a-school / school /app stundent

Task 2:

Notes:

* National ID must start with 1234 and must be 10 digits
* If school gender doesn’t accept mixed, it student’s gender must match school gender.

SELECT \* FROM Student.students

delete FROM Student.students

WHERE School\_ID = 5 AND Gender = 'M' ;

1. An ATM program is developed to check card type as the ATM will accept payment with Master Cards only would you mention what is the best practice for this piece of code:

If(Card.Type == “ATM”)

Accept Transaction;

Else if(Card.Type == “Youth” **||** Card.Type == “Premium”)

Return False;

Else

Return Error;

1. Find the error in the following piece of code:

int n = 0;

While( n<10)

{

int a =n+2;

int b =a+n;

System.out.println(“a = ”+a);

}

System.out.println(“a = “+a);

System.out.println(“b = “+b);

System.out.println(“n = “+n);

**API Manual Testing**

I made with python and api = https://openweathermap.org/api

Q1. Write SQL statement to retrieve applicant’s history whose names begin with A?

select A from dba\_hist\_sqltext

Q2. What are constraints?

the limitations and restrictions imposed by the technological environment, tools, platforms, or resources available when designing and developing a software system

Q3. What’s the difference between different types of Join?

* (INNER) JOIN: Returns records that have matching values in both tables
* LEFT (OUTER) JOIN: Returns all records from the left table, and the matched records from the right table
* RIGHT (OUTER) JOIN: Returns all records from the right table, and the matched records from the left table
* FULL (OUTER) JOIN: Returns all records when there is a match in either left or right table

Q4. How can SQL queries be optimized?

Q5. What are the ACID properties in SQL?

1. Atomicity: the entire transaction takes place at once or does not happen at all.
2. Consistency: every transaction results new valid data.
3. Isolation: transactions happen independently.
4. Durability: succeeded transactions must be saved to disk even if a system failure occurred.

Q6. What are the main differences between HAVING and WHERE SQL clauses?

HAVING Clause is used to filter the records from the groups based on the given condition in the HAVING Clause.

WHERE Clause is used to filter the records from the table or used while joining more than one table