Create a python program on the scenario given below:

Create an Employee table with attributes such as emp\_ssn, emp\_name, emp\_category, gross\_sal, basic\_sal.

Insert atleast three values in to the database.

Demonstrate the database concepts for the following scenario:

A company management wants to compute the net salary of each group of employee based on the category of the employee such as Category A, Category B, Category C.

Compute the net salary based on the following table.

|  |  |  |
| --- | --- | --- |
| Category | Tax Deducted | Dearness Allowance(DA) |
| A | 30% of gross salary | 80% of basic salary |
| B | 20% of gross salary | 50% of basic salary |
| C | 10% of gross salary | 30% of basic salary |

import sqlite3

connection = sqlite3.connect('XYZCOMPANY.db')

cursor = connection.cursor()

try:

    cursor.execute(

        """

        CREATE TABLE Employees(

            emp\_ssn INTEGER PRIMARY KEY,

            emp\_name TEXT,

            emp\_category TEXT,

            gross\_sal REAL,

            basic\_sal REAL

        )

        """

    )

except sqlite3.OperationalError:

    pass

for item in (

    (1, 'Rohan', 'A', 'NULL', 1000),

    (2, 'Mohan', 'B', 'NULL', 1000),

    (3, 'Sohan', 'C', 'NULL', 1000),

):cursor.execute("INSERT INTO Employees VALUES (?,?,?,?,?)", item)

connection.commit()

cursor.execute("SELECT \* FROM Employees")

empTuple = cursor.fetchall()

for tuple in empTuple :

    ssn,name,category,g\_sal, b\_sal = tuple

    if(category=='A'):

        da = 0.8\*b\_sal

        g\_sal = b\_sal + da

        taxamt = 0.3\*g\_sal

    elif(category=='B'):

        da = 0.5\*b\_sal

        g\_sal = b\_sal + da

        taxamt = 0.2\*g\_sal

    else:

        da = 0.3\*b\_sal

        g\_sal = b\_sal + da

        taxamt = 0.1\*g\_sal

    finalsal = b\_sal + da - taxamt

    cursor.execute("UPDATE Employees SET gross\_sal = {} WHERE emp\_ssn = {}".format(g\_sal,ssn))

    print(name, 'with ssn', ssn, 'has net salary', finalsal)

cursor.execute("SELECT \* FROM Employees")

empTuple = cursor.fetchall()

for tuple in empTuple:

    ssn,name,category,g\_sal, b\_sal = tuple

    emp = ("{}, {}, {}, {}, {}".format(ssn,name,category,g\_sal,b\_sal))

    print(emp)

cursor.close()

o/p

Rohan with ssn 1 has net salary 1260.0

Mohan with ssn 2 has net salary 1200.0

Sohan with ssn 3 has net salary 1170.0

1, Rohan, A, 1800.0, 1000.0

2, Mohan, B, 1500.0, 1000.0

3, Sohan, C, 1300.0, 1000.0

Implement Library management where students can borrow as well as donate books.

Books table:

* id INTEGER PRIMARY KEY
* name TEXT
* total\_count INTEGER

1. Insert values to the table

34,king,5

123,Harry Potter,3

1. Update the table based on user inputs:

based on book id

1. BORROW
2. RETURN









