## Завдання 1

Реалізуйте додаток «Кошик» для вебмагазину. Додаток має надавати функціональність для роботи з кошиком. Можливості додатку:

- Вхід у кошик за логіном та паролем;
- Додати товар у кошик;
- Видаляти товар з кошика;
- Змінити товар у кошику;
- Повне очищення кошика;
- Пошук даних у кошику;
- Перегляд вмісту кошика.

```
import pymysql
import os.path
import json
try:
   connection = pymysql.connect(
       host="localhost",
       port=3306,
       user="root",
       password="IDSharapo ff220601",
       database="trash",
        cursorclass=pymysql.cursors.DictCursor )
    print("Okay")
    try:
       # Create DATABASE
       # with connection.cursor() as cursor:
       # create_table = "CREATE DATABASE `trash`"
       # cursor.execute(create_table)
       # Create table
       # with connection.cursor() as cursor:
             create_table = "CREATE TABLE `User` (id int AUTO_INCREMENT, name
varchar(30),password varchar(100), PRIMARY KEY (id));"
       # cursor.execute(create_table)
# print("well done")
       # Create table
       # with connection.cursor() as cursor:
       # create_table = "CREATE TABLE `things` (id int AUTO_INCREMENT, name
varchar(30),cout int, PRIMARY KEY (id));"
       # cursor.execute(create_table)
       # print("well done")
       v=input("1.(Log in)\n2.(Sign in)\n")
       # Insert data
        if v=="2":
            login=input("Enter login: ")
            password=input("Enter password: ")
            with connection.cursor() as cursor:
                insert = f"INSERT INTO `User` (name,password) VALUES
('{login}','{password}')"
```

```
cursor.execute(insert)
                connection.commit()
                while True:
                    th = input("Do you want add things to your trash?(Yes or
No.Show,Delete,Update,Clear,Find): ")
                    if th == "No":
                        break
                    if th == "Yes":
                        # Insert data
                        thing = input("Enter what you want add: ")
                        hom = input("How much?: ")
                        with connection.cursor() as cursor:
                            insert = f"INSERT INTO `things` (name, password) VALUES
('{thing}',{hom})"
                            cursor.execute(insert)
                            connection.commit()
                    if th == "Show":
                        with connection.cursor() as cursor:
                            select_all = f"select * from trash.things"
                            cursor.execute(select all)
                            result = cursor.fetchall()
                            for row in result:
                                print(row)
                    if th == "Delete":
                        with connection.cursor() as cursor:
                            dele=input("Enter thing what you want delete: ")
                            select_all = f"DELETE FROM `things` WHERE name='{dele}';"
                            cursor.execute(select all)
                            result = cursor.fetchall()
                            for row in result:
                                print(row)
                    if th == "Update":
                        with connection.cursor() as cursor:
                            namee=input("Enter thing what you want update: ")
                            idd=int(input("and id this thing: "))
                            select all = f"UPDATE `things` SET name = '{namee}' WHERE
id ={idd} ;"
                            cursor.execute(select all)
                            result = cursor.fetchall()
                            for row in result:
                               print(row)
                    if th=="Find":
                        with connection.cursor() as cursor:
                            na=input("Enter name thing to find:")
                            select_all = f"select * from trash.things where
name='{na}'"
                            cursor.execute(select all)
                            result = cursor.fetchall()
                            for row in result:
                                print(row)
        # Select data
        if v=="1":
            conflogin=input("Enter login: ")
            confpassword=input("Enter password: ")
            with connection.cursor() as cursor:
                select_all = f"select * from trash.user where name='{conflogin}' and
password ='{confpassword}'"
                cursor.execute(select_all)
```

```
result = cursor.fetchall()
                for row in result:
                    print(row)
                    while True:
                        th = input("Do you want add things to your trash?(Yes or
No, Show): ")
                        if th == "No":
                            hreak
                        if th == "Yes":
                            # Insert data
                            thing = input("Enter what you want add: ")
                            hom = input("How much?: ")
                            with connection.cursor() as cursor:
                                insert = f"INSERT INTO `things` (name, password)
VALUES ('{thing}',{hom})"
                                cursor.execute(insert)
                                connection.commit()
                        if th == "Show":
                            with connection.cursor() as cursor:
                                select all = f"select * from trash.things"
                                cursor.execute(select_all)
                                result = cursor.fetchall()
                                for row in result:
                                    print(row)
                        if th == "Delete":
                            with connection.cursor() as cursor:
                                dele = input("Enter thing what you want delete: ")
                                select all = f"DELETE FROM `things` WHERE
name='{dele}';"
                                cursor.execute(select_all)
                                result = cursor.fetchall()
                                for row in result:
                                    print(row)
                        if th == "Update":
                            with connection.cursor() as cursor:
                                namee = input("Enter thing what you want update: ")
                                idd = int(input("and id this thing: "))
                                select_all = f"UPDATE `things` SET name = '{namee}'
WHERE id ={idd};"
                                cursor.execute(select_all)
                                result = cursor.fetchall()
                                for row in result:
                                    print(row)
                        if th == "Find":
                            with connection.cursor() as cursor:
                                na = input("Enter name thing to find:")
                                select_all = f"select * from trash.things where
name='{na}'"
                                cursor.execute(select all)
                                result = cursor.fetchall()
                                for row in result:
                                    print(row)
        # Drope table
        # with connection.cursor() as cursor:
            create_table = "DROP TABLE `things`"
            cursor.execute(create_table)
    finally:
```

```
connection.close()
except:
    print("error")
```

Зберігайте дані у базі даних NoSQL. Можете використовувати Redis в якості платформи.

## Завдання 2

Реалізуйте додаток «Таблиця рекордів» для гри. Додаток має дозволити працювати з таблицею рекордів гри. Можливості додатку:

- Вхід у таблицю рекордів за логіном і паролем;
- Додати результати користувача до таблиці
- Видаляти результати з таблиці;
- Змінювати результат в таблиці;
- Повне очищення таблиці;
- Пошук даних в таблиці;
- Перегляд вмісту таблиці;
- Відображення найкращої десятки результатів. Зберігайте дані у базі даних NoSQL.

Можете використовувати Redis в якості платформи.

```
import pymysql
import os.path
import json
try:
    connection = pymysql.connect(
       host="localhost",
        port=3306,
       user="root",
        password="IDSharapo ff220601",
        database="records",
        cursorclass=pymysql.cursors.DictCursor )
    print("Okay")
    try:
       # Create DATABASE
       # with connection.cursor() as cursor:
       # create table = "CREATE DATABASE ` records `"
             cursor.execute(create table)
        # Create table
        # with connection.cursor() as cursor:
             create_table = "CREATE TABLE `User` (id int AUTO_INCREMENT, name
varchar(30),password varchar(100), PRIMARY KEY (id));"
       # cursor.execute(create_table)
# print("well done")
       # Create table
        # with connection.cursor() as cursor:
            create_table = "CREATE TABLE `things` (id int AUTO_INCREMENT, name
varchar(30),cout int, PRIMARY KEY (id));"
       # cursor.execute(create_table)
       # print("well done")
```

```
v=input("1.(Log in)\n2.(Sign in)\n")
        # Insert data
        if v=="2":
            login=input("Enter login: ")
            password=input("Enter password: ")
            with connection.cursor() as cursor:
                insert = f"INSERT INTO `User` (name,password) VALUES
('{login}','{password}')"
                cursor.execute(insert)
                connection.commit()
                while True:
                    th = input("Do you want add things to your tables?(Yes or
No.Show,Delete,Update,Clear,Find): ")
                    if th == "No":
                        break
                    if th == "Yes":
                        # Insert data
                        thing = input("Enter what you want add: ")
                        hom = input("How much?: ")
                        with connection.cursor() as cursor:
                            insert = f"INSERT INTO `things` (name, password) VALUES
('{thing}',{hom})"
                            cursor.execute(insert)
                            connection.commit()
                    if th == "Show":
                        with connection.cursor() as cursor:
                            select_all = f"select * from records.things"
                            cursor.execute(select_all)
                            result = cursor.fetchall()
                            for row in result:
                                print(row)
                    if th == "Delete":
                        with connection.cursor() as cursor:
                            dele=input("Enter thing what you want delete: ")
                            select_all = f"DELETE FROM `things` WHERE name='{dele}';"
                            cursor.execute(select_all)
                            result = cursor.fetchall()
                            for row in result:
                                print(row)
                    if th == "Update":
                        with connection.cursor() as cursor:
                            namee=input("Enter thing what you want update: ")
                            idd=int(input("and id this thing: "))
                            select all = f"UPDATE `things` SET name = '{namee}' WHERE
id ={idd} ;"
                            cursor.execute(select_all)
                            result = cursor.fetchall()
                            for row in result:
                                print(row)
                    if th=="Find":
                        with connection.cursor() as cursor:
                            na=input("Enter name thing to find:")
                            select_all = f"select * from records.things where
name='{na}'"
                            cursor.execute(select all)
                            result = cursor.fetchall()
                            for row in result:
```

```
print(row)
        # Select data
        if v=="1":
            conflogin=input("Enter login: ")
            confpassword=input("Enter password: ")
            with connection.cursor() as cursor:
                select_all = f"select * from records.user where name='{conflogin}' and
password ='{confpassword}'"
                cursor.execute(select_all)
                result = cursor.fetchall()
                for row in result:
                    print(row)
                    while True:
                        th = input("Do you want add things to your records?(Yes or
No, Show): ")
                        if th == "No":
                            break
                        if th == "Yes":
                            # Insert data
                            thing = input("Enter what you want add: ")
                            hom = input("How much?: ")
                            with connection.cursor() as cursor:
                                insert = f"INSERT INTO `things` (name, password)
VALUES ('{thing}',{hom})"
                                cursor.execute(insert)
                                connection.commit()
                        if th == "Show":
                            with connection.cursor() as cursor:
                                select_all = f"select * from records.things"
                                cursor.execute(select_all)
                                result = cursor.fetchall()
                                for row in result:
                                   print(row)
                        if th == "Delete":
                            with connection.cursor() as cursor:
                                dele = input("Enter thing what you want delete: ")
                                select_all = f"DELETE FROM `things` WHERE
name='{dele}';"
                                cursor.execute(select_all)
                                result = cursor.fetchall()
                                for row in result:
                                    print(row)
                        if th == "Update":
                            with connection.cursor() as cursor:
                                namee = input("Enter thing what you want update: ")
                                idd = int(input("and id this thing: "))
                                select_all = f"UPDATE `things` SET name = '{namee}'
WHERE id ={idd};"
                                cursor.execute(select all)
                                result = cursor.fetchall()
                                for row in result:
                                    print(row)
                        if th == "Find":
                            with connection.cursor() as cursor:
                                na = input("Enter name thing to find:")
                                select_all = f"select * from records.things where
name='{na}'"
                                cursor.execute(select_all)
```

```
result = cursor.fetchall()
                               for row in result:
                                   print(row)
       # Drope table
       # with connection.cursor() as cursor:
        # create table = "DROP TABLE `things`"
             cursor.execute(create_table)
    finally:
       connection.close()
except:
   print("error")
```

Завдання 3

Реалізуйте додаток «Стрічка новин». Додаток має зберігати десять найактуальніших новин. Можливості додатку:

- Вхід за логіном і паролем;
- Додавати новини;
- Видаляти новини;
- Змінювати новини;
- Повне очищення таблиці новин;
- Перегляд стрічки новин;
- Відображення найсвіжішої новини.

Дані необхідно зберігати у базі даних NoSQL. Можете використовувати Redis в якості платформи.

```
import pymysql
import os.path
import json
try:
    connection = pymysql.connect(
        host="localhost",
        port=3306,
        user="root",
        password="IDSharapo_ff220601",
        database="news",
        cursorclass=pymysql.cursors.DictCursor )
    print("Okay")
    try:
        # Create DATABASE
        # with connection.cursor() as cursor:
        # create_table = "CREATE DATABASE `news`"
             cursor.execute(create_table)
        # Create table
        # with connection.cursor() as cursor:
             create_table = "CREATE TABLE `User` (id int AUTO_INCREMENT, name
varchar(30),password varchar(100), PRIMARY KEY (id));"
       # cursor.execute(create_table)
       # print("well done")
        # Create table
        # with connection.cursor() as cursor:
              create_table = "CREATE TABLE `things` (id int AUTO_INCREMENT, name
```

```
varchar(30),cout int, PRIMARY KEY (id));"
             cursor.execute(create table)
        #
              print("well done")
        v=input("1.(Log in)\n2.(Sign in)\n")
        # Insert data
        if \vee == "2":
            login=input("Enter login: ")
            password=input("Enter password: ")
            with connection.cursor() as cursor:
                insert = f"INSERT INTO `User` (name,password) VALUES
('{login}','{password}')"
                cursor.execute(insert)
                connection.commit()
                while True:
                    th = input("Do you want add things to your news?(Yes or
No.Show,Delete,Update,Clear,Find): ")
                    if th == "No":
                        break
                    if th == "Yes":
                        # Insert data
                        thing = input("Enter what you want add: ")
                        hom = input("How much?: ")
                        with connection.cursor() as cursor:
                            insert = f"INSERT INTO `things` (name, password) VALUES
('{thing}',{hom})"
                            cursor.execute(insert)
                            connection.commit()
                    if th == "Show":
                        with connection.cursor() as cursor:
                            select_all = f"select * from news.things"
                            cursor.execute(select all)
                            result = cursor.fetchall()
                            for row in result:
                                print(row)
                    if th == "Delete":
                        with connection.cursor() as cursor:
                            dele=input("Enter thing what you want delete: ")
                            select_all = f"DELETE FROM `things` WHERE name='{dele}';"
                            cursor.execute(select_all)
                            result = cursor.fetchall()
                            for row in result:
                                print(row)
                    if th == "Update":
                        with connection.cursor() as cursor:
                            namee=input("Enter thing what you want update: ")
                            idd=int(input("and id this thing: "))
                            select_all = f"UPDATE `things` SET name = '{namee}' WHERE
id ={idd} ;"
                            cursor.execute(select_all)
                            result = cursor.fetchall()
                            for row in result:
                                print(row)
                    if th=="Find":
                        with connection.cursor() as cursor:
                            na=input("Enter name thing to find:")
```

```
select_all = f"select * from news.things where
name='{na}'"
                            cursor.execute(select all)
                            result = cursor.fetchall()
                            for row in result:
                                print(row)
        # Select data
        if v=="1":
            conflogin=input("Enter login: ")
            confpassword=input("Enter password: ")
            with connection.cursor() as cursor:
                select_all = f"select * from news.user where name='{conflogin}' and
password ='{confpassword}'"
                cursor.execute(select_all)
                result = cursor.fetchall()
                for row in result:
                    print(row)
                    while True:
                        th = input("Do you want add things to your news?(Yes or
No, Show): ")
                        if th == "No":
                            break
                        if th == "Yes":
                            # Insert data
                            thing = input("Enter what you want add: ")
                            hom = input("How much?: ")
                            with connection.cursor() as cursor:
                                insert = f"INSERT INTO `things` (name, password)
VALUES ('{thing}',{hom})"
                                cursor.execute(insert)
                                connection.commit()
                        if th == "Show":
                            with connection.cursor() as cursor:
                                select all = f"select * from news.things"
                                cursor.execute(select_all)
                                result = cursor.fetchall()
                                for row in result:
                                    print(row)
                        if th == "Delete":
                            with connection.cursor() as cursor:
                                dele = input("Enter thing what you want delete: ")
                                select all = f"DELETE FROM `things` WHERE
name='{dele}';"
                                cursor.execute(select_all)
                                result = cursor.fetchall()
                                for row in result:
                                    print(row)
                        if th == "Update":
                            with connection.cursor() as cursor:
                                namee = input("Enter thing what you want update: ")
                                idd = int(input("and id this thing: "))
                                select_all = f"UPDATE `things` SET name = '{namee}'
WHERE id ={idd};"
                                cursor.execute(select_all)
                                result = cursor.fetchall()
                                for row in result:
                                    print(row)
                        if th == "Find":
```

```
with connection.cursor() as cursor:
                               na = input("Enter name thing to find:")
                               select_all = f"select * from news.things where
name='{na}'"
                               cursor.execute(select_all)
                               result = cursor.fetchall()
                               for row in result:
                                  print(row)
       # Drope table
       # with connection.cursor() as cursor:
       # create_table = "DROP TABLE `things`"
       # cursor.execute(create_table)
   finally:
      connection.close()
except:
  print("error")
```