**1-regicter customer:**

**CREATE OR REPLACE FUNCTION registerCheck(userName text,passwd text,**

**userBalance numeric,user\_Job text,userEmail text,userAddress text,birthDate date,**

**interests text) RETURNS Boolean AS $$**

**DECLARE**

**userID integer;**

**isUserRedistered integer;**

**BEGIN**

**SELECT COUNT(user\_id) INTO isUserRedistered FROM users WHERE**

**email =userEmail;**

**IF isUserRedistered = 0**

**THEN**

**SELECT COUNT(user\_id) INTO userID FROM users;**

**userID = userID + 1;**

**INSERT INTO users VALUES(userID,’ customer’ , userName, passwd,**

**userBalance, user\_Job, userEmail, userAddress, birthdate, interests);**

**RETURN true;**

**Else**

**RETURN false;**

**END IF;**

**END;**

**$$LANGUAGE plpgsql;**

**SELECT registerCheck('mohab93','12assasa',3800.50,'Engineer','mohab93@gmail.com','38swes','2017-01-01','ayhabel');**

**2- check Login**

**CREATE OR REPLACE FUNCTION loginCheck(loginEmail text, passwd text)RETURNS text AS $$**

**DECLARE**

**privilageResult text;**

**BEGIN**

**SELECT privilege INTO privilageResult FROM users WHERE email=loginEmail AND password=passwd;**

**RETURN privilageResult;**

**END;**

**$$LANGUAGE plpgsql;**

**3- Get User Info**

**CREATE OR REPLACE FUNCTION getUserInfo (user\_id int) RETURNS SETOF products AS $$**

**DECLARE**

**BEGIN**

**RETURN QUERY (SELECT \* FROM products WHERE product\_id= prod\_id);**

**END;**

**$$LANGUAGE plpgsql;**

**CREATE OR REPLACE FUNCTION updateProductInfo () RETURNS Boolean AS $$**

**DECLARE**

**BEGIN**

**END;**

**$$LANGUAGE plpgsql;**

**4- Retrieve All Users**

**CREATE OR REPLACE FUNCTION retrieveAllUsers() RETURNS TABLE(userID integer,userName text,userPasswd text,**

**userBalance numeric,userJob text,userEmail text,userAddress text,userBDate date,userInterests text) AS $$**

**BEGIN**

**RETURN QUERY (SELECT user\_id,user\_name,password,balance,job,email,address,birth\_date,**

**interests FROM users WHERE privilege='customer');**

**END;**

**$$LANGUAGE plpgsql;**

**5- Remove User**

**CREATE OR REPLACE FUNCTION removeUser(userID integer) RETURNS Boolean AS $$**

**DECLARE**

**BEGIN**

**DELETE FROM users WHERE user\_id=userID;**

**RETURN true;**

**END;**

**$$LANGUAGE plpgsql;**

**#####################---------------------------------------------#############################**

**1-ADD Category**

CREATE OR REPLACE FUNCTION addNewCategory (categoryName text, categoryIcon text) RETURNS Boolean AS $$  
DECLARE

numberOfCategories integer;

isCategoryExist integer;

BEGIN

SELECT COUNT(category\_id) INTO isCategoryExist FROM categories WHERE category\_icon= categoryIcon;

If isCategoryExist =0

THEN

SELECT COUNT(category\_id) INTO numberOfCategories FROM categories;

numberOfCategories = numberOfCategories +1;

INSERT INTO categories VALUES(numberOfCategories , categoryName, categoryIcon);

RETURN true;

ELSE

RETURN false;

END IF;

END;

$$LANGUAGE plpgsql;

**Select addNewCategory(‘shoses’,’URL3’);**

**2-REMOVE Category**

**CREATE OR REPLACE FUNCTION removeCategory(categoryID integer) RETURNS Boolean AS $$  
DECLARE**

**BEGIN**

**DELETE FROM categories WHERE category\_id= categoryID;**

**RETURN true;**

**END;**

**$$LANGUAGE plpgsql;**

**#############################-----------------------------------###########################**

**1-ADD NEW Product**

**CREATE OR REPLACE FUNCTION addNewproduct(prodName text,prodQuantity integer,price numeric,shortDesc text, fullDesc text,categoryID integer,productURL text) RETURNS Boolean AS $$  
DECLARE**

**numberOfProducts integer;**

**isItExist integer;**

**BEGIN**

**SELECT COUNT(\*) INTO isItExist FROM products WHERE product\_url = productURL;**

**If isItExist =0**

**THEN**

**SELECT COUNT(product\_id) INTO numberOfProducts FROM products;**

**numberOfProducts = numberOfProducts +1;**

**INSERT INTO products VALUES(numberOfProducts ,prodName, prodQuantity, price, shortDesc, fullDesc, categoryID, productURL);**

**RETURN true;**

**ELSE**

**RETURN false;**

**END IF;**

**END;**

**$$LANGUAGE plpgsql;**

select addNewProduct(6,'mohsenproduct',8,123456,'Engineer','mohamed93gmailcom',2,'url8');

**2-REMOVE Product**

**CREATE OR REPLACE FUNCTION removeProduct(prod\_id integer) RETURNS Boolean AS $$  
DECLARE**

**BEGIN**

**DELETE FROM products WHERE product\_id= prod\_id;**

**RETURN true;**

**END;**

**$$LANGUAGE plpgsql;**

**3-Retrieve Product Info**

**CREATE OR REPLACE FUNCTION getProductInfo (prod\_id int) RETURNS SETOF products AS $$  
DECLARE**

**BEGIN**

**RETURN QUERY (SELECT \* FROM products WHERE product\_id= prod\_id);**

**END;**

**$$LANGUAGE plpgsql;**

**CREATE OR REPLACE FUNCTION updateProductInfo () RETURNS Boolean AS $$  
DECLARE**

**BEGIN**

**END;**

**$$LANGUAGE plpgsql;**

**4-EDIT Product classifications**

**5-Retrieve ALL Products**

**CREATE OR REPLACE FUNCTION retrieveAllProducts() RETURNS TABLE(prodID integer,prodName text,prodQuantity integer, prodPrice numeric,shortDesc text, fullDesc text,categoryID integer,productURL text) AS $$**

**BEGIN**

**RETURN QUERY SELECT product\_id,product\_name, product\_quantity, price, short\_des, full\_des,**

**category\_id, product\_url FROM products;**

**END;**

**$$LANGUAGE plpgsql;**