PL/SQL Assignments

Date of Submission: 29-09-2022

DDL/DML:

```
/* Create table product */
create table product(prod_id number(6) NOT NULL,
prod_title varchar2(255) NOT NULL,
prod_price number(10,2) NOT NULL,
prod_category varchar2(255) NOT NULL,
PRIMARY KEY(prod_id));
```

```
/* Inserting mutiple rows in same query at a same time. */
INSERT ALL

INTO product values (1, 'Oppo A10', 12000, 'mobile')

INTO product values (2, 'Nokia N95', 17000, 'mobile')

INTO product values (3, 'Dell Latitude', 52000, 'laptop')

INTO product values (4, 'HP Laser L12', 72000, 'laptop')

INTO product values (5, 'Apple Iphone SE', 18000, 'mobile')

select 1 from dual;
```

1	10ppo A10	12000 mobile
2	2Nokia N95	17000 mobile
3	3Dell Latitude	52000 laptop
4	4HP Laser L12	72000 laptop
5	5Apple Iphone SE	

- 1. Create a stored procedure that displays Average price of the products based on given category.
 - Create Anonymous procedure to call the above stored procedure.
- 2. Write a function that would return total number of products based on given category. Call the function from anonymous procedure block.
- 3. Write a trigger to track the updates made in price of the product. If UPDATE of price happens in product table, the trigger must get called AFTER the update operation has completed.
 - The trigger must make an entry in product_log(prod_id, old_price, new_price, price_diff, updateDate) table.
 - Note: Write the DDL to create a product_log table before executing update operation.
- 4. Create a stored procedure to return title and price of the product based on ID given. Use exceptions to display appropriate error messages in the console.
 - If ID is invalid, print "ID is not present in the product table"
 - If ID <= 0, print "ID cannot be less than or equal to Zero"
- 5. Create a Self-Defined Exception "INVALID_ID_EXCEPTION" and use it in the above assignment (4). Raise INVALID_ID_EXCEPTION, if id <= 0
- 6. Create a cursor within the stored procedure to display all the products based on given category.
 - Note: List all implicit and explicit cursors used in the assignment.

- 7. Create a View prod_view to hide the price of the product from actual product table.
- 8. Write an anonymous procedure using For loop and basic loop to print all even and odd numbers until 10.