**Ex.No.:7A**

**EXCEPTION HANDLING – CUSTOMER DATABASE**

**Date**

**Program:**

DECLARE

c\_id customers.id%type := 2;

c\_name customers.name%type;

c\_addr customers.address%type;

BEGIN

SELECT name, address INTO c\_name, c\_addr

FROM customers WHERE id = c\_id;

DBMS\_OUTPUT.PUT\_LINE ('Name: '|| c\_name);

DBMS\_OUTPUT.PUT\_LINE ('Address: ' || c\_addr);

EXCEPTION

WHEN no\_data\_found THEN

dbms\_output.put\_line('No such customer!');

WHEN others THEN

dbms\_output.put\_line('Error!');

END;

/

**Output 1:-**

Sql> @ pgm1;

Name: XXX

Address: Chennai

PL/SQL procedure successfully completed.

**Output 2:-**

Sql>delete from customers where id=8;

Sql> @ pgm1;

No such customer!

PL/SQL procedure successfully completed.

**Ex.No.:7B**

**EXCEPTION HANDLING – SALES DATABASE**

**Date**

**Program:**

CREATE OR REPLACE PROCEDURE add\_new\_order(order\_id\_in IN NUMBER, sales\_in IN NUMBER)IS

no\_sales EXCEPTION;

BEGIN

IF sales\_in = 0 THEN

RAISE no\_sales;

ELSE

INSERT INTO orders (order\_id, total\_sales )VALUES (

order\_id\_in, sales\_in);

END IF;

EXCEPTION

WHEN no\_sales THEN

raise\_application\_error (-20001,'You must have sales in

order to submit the order.');

WHEN OTHERS THEN

raise\_application\_error (-20002,'An error has occurred

inserting an order.');

END;

/

**Output:-**

Procedure created

Sql> exec add\_new\_order(1,0);

You must have sales in order to submit the order.

PL/SQL procedure successfully completed.

**Ex.No.:8A**

**FUNCTIONS – MAXIMUM OF TWO NUMBERS**

**Date**

**Program:**

DECLARE

a number;

b number;

c number;

FUNCTION findMax(x IN number, y IN number)RETURN number IS

z number;

BEGIN

IF x > y THEN

z:= x;

ELSE

Z:= y;

END IF;

RETURN z;

END;

BEGIN

a:= 23;

b:= 45;

c := findMax(a, b);

dbms\_output.put\_line(' Maximum of (23,45): ' || c);

END;

/

**Output:-**

Maximum of (23,45): 45

PL/SQL procedure successfully completed.

**Ex.No.:8B**

**FUNCTIONS – FACTORIAL USING RECURSION**

**Date**

**Program:**

DECLARE

num number;

factorial number;

FUNCTION fact(x number)RETURN number IS

f number;

BEGIN

IF x=0 THEN

f := 1;

ELSE

f := x \* fact(x-1);

END IF;

RETURN f;

END;

BEGIN

num:= 6;

factorial := fact(num);

dbms\_output.put\_line(' Factorial of '|| num || ' is ' || factorial);

END;

/

**Output:-**

Factorial of 6 is 720

PL/SQL procedure successfully completed.