*Gabriel Nestor* ITI-2180 Foundations of Data and Database Management

**Problem A**

**CODE:**

CREATE SEQUENCE customers\_customer#\_seq

INCREMENT BY 1

START WITH 1021

NOCACHE

NOCYCLE;

INSERT INTO customers (

customer#,

lastname,

firstname

) VALUES (

customers\_customer#\_seq.NEXTVAL,

'JENKINS',

'LEROY'

);

SELECT

customer#,

firstname,

lastname

FROM

customers;

**OUTPUT:**

Sequence CUSTOMERS\_CUSTOMER#\_SEQ created.

1 row inserted.

CUSTOMER# FIRSTNAME LASTNAME

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1001 BONITA MORALES

1002 RYAN THOMPSON

1003 LEILA SMITH

1004 THOMAS PIERSON

1005 CINDY GIRARD

1006 MESHIA CRUZ

1007 TAMMY GIANA

1008 KENNETH JONES

1009 JORGE PEREZ

1010 JAKE LUCAS

1011 REESE MCGOVERN

CUSTOMER# FIRSTNAME LASTNAME

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1012 WILLIAM MCKENZIE

1013 NICHOLAS NGUYEN

1014 JASMINE LEE

1015 STEVE SCHELL

1016 MICHELL DAUM

1017 BECCA NELSON

1018 GREG MONTIASA

1019 JENNIFER SMITH

1020 KENNETH FALAH

1021 LEROY JENKINS

21 rows selected.

**Problem B**

**CODE:**

INSERT INTO CUSTOMERS (CUSTOMER#, LASTNAME, FIRSTNAME, ZIP)

VALUES(CUSTOMERS\_CUSTOMER#\_SEQ.NEXTVAL, 'SHOULDERS', 'FRANK', 23567);

SELECT CUSTOMER#, LASTNAME, FIRSTNAME, ZIP

FROM CUSTOMERS

WHERE ZIP = 23567;

**OUTPUT:**

1 row inserted.

CUSTOMER# LASTNAME FIRSTNAME ZIP

---------- ---------- ---------- -----

1021 SHOULDERS FRANK 23567

**Problem C**

**CODE:**

CREATE SEQUENCE MY\_FIRST\_SEQ

INCREMENT BY -3

START WITH 5

NOCACHE

NOCYCLE

MAXVALUE 5

MINVALUE 0;

SELECT SEQUENCE\_NAME

FROM USER\_SEQUENCES;

**OUTPUT:**

Sequence MY\_FIRST\_SEQ created.

SEQUENCE\_NAME

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CUSTOMERS\_CUSTOMER#\_SEQ

MY\_FIRST\_SEQ

**Problem D**

**CODE:**

SELECT MY\_FIRST\_SEQ.NEXTVAL

FROM DUAL;

SELECT MY\_FIRST\_SEQ.NEXTVAL

FROM DUAL;

SELECT MY\_FIRST\_SEQ.NEXTVAL

FROM DUAL;

**OUTPUT:**

NEXTVAL

----------

5

NEXTVAL

----------

2

Error starting at line : 7 in command -

SELECT MY\_FIRST\_SEQ.NEXTVAL

FROM DUAL

Error report -

ORA-08004: sequence **MY\_FIRST\_SEQ.NEXTVAL goes below MINVALUE** and cannot be instantiated

**Problem E**

**CODE:**

ALTER SEQUENCE MY\_FIRST\_SEQ

MINVALUE -1000;

SELECT SEQUENCE\_NAME, MIN\_VALUE

FROM USER\_SEQUENCES;

**OUTPUT:**

Sequence MY\_FIRST\_SEQ altered.

SEQUENCE\_NAME MIN\_VALUE

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CUSTOMERS\_CUSTOMER#\_SEQ 1

MY\_FIRST\_SEQ -1000

**Problem F**

**CODE:**

ALTER TABLE ORDERS

ADD (OSTATUS VARCHAR2(1) DEFAULT 'P',

CHECK (OSTATUS IN ('P', 'B', 'C', 'S'))

);

SELECT OSTATUS

FROM ORDERS;

**OUTPUT:**

Table ORDERS altered.

O

-

P

P

P

P

P

P

P

P

P

P

P

O

-

P

P

P

P

P

P

P

P

P

P

P

22 rows selected.

**Problem G**

**CODE:**

CREATE TABLE ohistory (

oseq# NUMBER(4),

order# NUMBER(4),

ostatus VARCHAR2(1) DEFAULT 'P',

sdate DATE,

CONSTRAINT ohistory\_oseq#\_pk PRIMARY KEY ( oseq# ),

CONSTRAINT ohistory\_order#\_fk FOREIGN KEY ( order# )

REFERENCES orders ( order# ),

CHECK ( ostatus IN ( 'P', 'B', 'C', 'S' ) )

);

**OUTPUT:**

Table OHISTORY created.

**Problem H**

**CODE:**

CREATE SEQUENCE ohistory\_oseq#\_seq

INCREMENT BY 1

START WITH 1000

NOCACHE

NOCYCLE;

SELECT

sequence\_name

FROM

user\_sequences

WHERE

sequence\_name = 'OHISTORY\_OSEQ#\_SEQ';

**OUTPUT:**

Sequence OHISTORY\_OSEQ#\_SEQ created.

SEQUENCE\_NAME

-------------------

OHISTORY\_OSEQ#\_SEQ

**Problem I**

**CODE:**

CREATE INDEX OHISTORY\_ORDER#\_IDX

ON OHISTORY (ORDER#);

SELECT INDEX\_NAME

FROM USER\_INDEXES

WHERE INDEX\_NAME = 'OHISTORY\_ORDER#\_IDX';

**OUTPUT:**

Index OHISTORY\_ORDER#\_IDX created.

INDEX\_NAME

--------------------

OHISTORY\_ORDER#\_IDX

**Problem J**

**CODE:**

SELECT TABLE\_NAME, INDEX\_NAME, COLUMN\_NAME

FROM USER\_IND\_COLUMNS

WHERE TABLE\_NAME = 'OHISTORY';

**OUTPUT:**

TABLE\_NAME INDEX\_NAME COLUMN\_NAME

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OHISTORY OHISTORY\_OSEQ#\_PK OSEQ#

OHISTORY OHISTORY\_ORDER#\_IDX ORDER#