# *Database Management I (420-D10-HR)*

# *Happy Valley Kennels Project*

# *Assignment 5 -* *Table Inserts, updates and queries*

Date assigned: Monday, November 7, 2016

Date due: **Friday, November 11, 2016, 11:50pm**

**Learning Objectives**

After completing this assignment, the student will be able to

* Insert data values into Oracle tables
* Create Oracle sequences
* Update fields

***To do****:*

*Capture all your SQL work for each task in a SQL file* ***username*\_D10\_A05.sql** *and submit to Moodle. This is good practice if your data is lost, you can rerun the script to re-insert.*

|  |  |
| --- | --- |
| **Task** | **Marks** |
| The valid values for the reservation status column are contained in the "Status\_Codes\_for\_HVK" document on the HVK page in **Moodle**. Add a these check constraint to your Reservation table for values. ALTER TABLE HVK\_RESERVATION  ADD CONSTRAINT CHK\_STATUS  CHECK (RESERVATION\_STATUS >= 1 AND RESERVATION\_STATUS <= 5);  ALTER TABLE HVK\_RUN  ADD CONSTRAINT CHK\_RUN\_STATUS  CHECK (CHK\_RUN\_STATUS >= 1 AND CHK\_RUN\_STATUS <= 3); | 5 |
| Run the script to create the database and insert values | 5 |
| Create Oracle sequences for the primary keys for the following tables: hvk\_owner, hvk\_pet, hvk\_reservation, hvk\_pet\_reservation, hvk\_food, hvk\_veterinarian and hvk\_medication. Name the sequences hvk\_owner\_seq, hvk\_pet\_seq, hvk\_reservation\_seq, hvk\_pet\_res\_seq, hvk\_food\_seq, hvk\_vet\_seq and hvk\_medication\_seq. The starting sequence number for each of the sequences is shown Appendix A | 5 |
| It’s an old database, let’s update it. See Appendix B. | 10 |
| It’s a thing of beauty. Back it up. Submit the SQL file with your assignment. See Appendix C. | 5 |
| Organization | 5 |
| **Total** | **35** |

# Appendix A

|  |  |
| --- | --- |
| **Sequence** | **Starts at** |
| hvk\_food\_seq | 50 |
| hvk\_medication\_seq | 10 |
| hvk\_owner\_seq | 50 |
| hvk\_pet\_res\_seq | 1000 |
| hvk\_pet\_seq | 50 |
| hvk\_reservation\_seq | 1000 |
| hvk\_vet\_seq | 10 |

## Show me the commands you used to create the Sequences:

CREATE SEQUENCE hvk\_food\_seq START WITH 50;

CREATE SEQUENCE hvk\_medication\_seq START WITH 10;

CREATE SEQUENCE hvk\_owner\_seq START WITH 50;

CREATE SEQUENCE hvk\_pet\_res\_seq START WITH 1000;

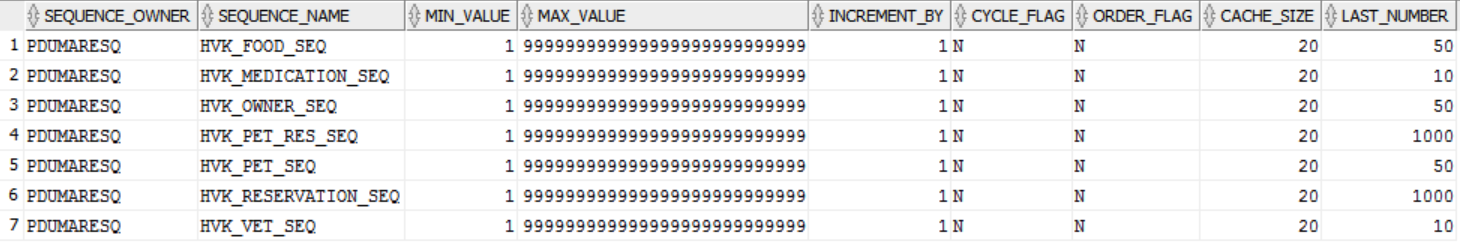
CREATE SEQUENCE hvk\_pet\_seq START WITH 50;

CREATE SEQUENCE hvk\_reservation\_seq START WITH 1000;

CREATE SEQUENCE hvk\_vet\_seq START WITH 10;

## Show the sequences (use your own userid):

select \* from all\_sequences where sequence\_owner = 'RCHAN'



# Appendix B

|  |  |
| --- | --- |
| **Table.field** | **Update** |
| HVK\_PET | Increase YEAR portion by 5. i.e. 21-May-07 becomes 21-May-12 |
| HVK\_PET\_VACCINATION.  VACCINATION\_EXPIRY\_DATE | Increase YEAR portion by +1 years. i.e. 17-Jul-15 become 17-Jul-16 |
| HVK\_RESERVATION.  RESERVATION\_START\_DATE,  RESERVATION\_END\_DATE | Increase YEAR portion by +1 years. i.e. 17-Jul-15 become 17-Jul-16 |

## Show me the commands you used to update each table. (Remember to rollback/commit your changes depending on if you want to keep your changes or if you want to recover from an update error).

UPDATE hvk\_pet

SET pet\_birthdate = add\_months(pet\_birthdate, 5\*12)

WHERE pet\_birthdate IS NOT NULL;

UPDATE hvk\_pet\_vaccination

SET vaccination\_expiry\_date = ADD\_MONTHS(vaccination\_expiry\_date, 12)

WHERE vaccination\_expiry\_date IS NOT NULL;

UPDATE hvk\_reservation

SET reservation\_start\_date = ADD\_MONTHS(reservation\_start\_date, 12)

WHERE reservation\_start\_date IS NOT NULL;

UPDATE hvk\_reservation

SET reservation\_end\_date = ADD\_MONTHS(reservation\_end\_date, 12)

WHERE reservation\_end\_date IS NOT NULL;

## Show me the SELECT and output of the following queries

### Show all pets name and birthdates for pets with known birthdays.

SELECT pet\_name, pet\_birthdate

FROM hvk\_pet

WHERE pet\_birthdate IS NOT NULL;

### Show all vaccinations by pet name, vaccination expiry, vaccination name in order of vaccination expiry

SELECT DISTINCT p.pet\_name, pv.vaccination\_expiry\_date, v.vaccination\_name, p.pet\_number

FROM hvk\_pet p, hvk\_pet\_vaccination pv, hvk\_vaccination v

WHERE p.pet\_number = pv.pet\_pet\_number

AND pv.vacc\_vaccination\_number = v.vaccination\_number

ORDER BY p.pet\_number asc;

(note dates are wrong, but study for format)

|  |  |  |  |
| --- | --- | --- | --- |
| Pet Name | Expiry Date | Vaccination Name | Pet Number |
| Tripod | 17-JUL-12 | Rhinotracheitis | 5 |
| Tripod | 17-JUL-13 | Calicivirus | 5 |
| Chloe | 13-SEP-13 | Rhinotracheitis | 8 |
| Chloe | 13-SEP-13 | Rabies | 8 |
| Chloe | 13-SEP-13 | Panleukopenia | 8 |
| Chloe | 13-SEP-13 | Calicivirus | 8 |
| Noah | 02-NOV-13 | Rhinotracheitis | 38 |
| Noah | 02-NOV-13 | Rabies | 38 |
| Noah | 02-NOV-13 | Panleukopenia | 38 |
| Huxley | 07-NOV-13 | Hepatitis | 6 |
| Huxley | 07-NOV-13 | Parovirus | 6 |

### Show all reservations sorted by start date. For each row, show reservation number, start date, end date and pet name.

SELECT r.reservation\_number, r.reservation\_start\_date,

r.reservation\_end\_date, p.pet\_name

FROM hvk\_reservation r, hvk\_pet p, hvk\_pet\_reservation pr

WHERE p.pet\_number = pr.pet\_pet\_number

AND pr.res\_reservation\_number = r.reservation\_number;

(note dates are wrong, but study for format)

|  |  |  |  |
| --- | --- | --- | --- |
| Reservation Number | Start Date | End Date | Pet Name |
| 100 | JULY 12,2013 | JULY 19,2013 | Archie |
| 100 | JULY 12,2013 | JULY 19,2013 | Scrabble |
| 102 | JULY 16,2013 | JULY 18,2013 | Logan |
| 103 | AUGUST 01,2013 | SEPTEMBER 05,2013 | Huxley |
| 104 | AUGUST 15,2013 | AUGUST 22,2013 | Parker |
| … etc |  |  |  |

# Appendix C

## Backing up the Oracle Database

From SQL Developer:

Tools->Database Export

Select your DB connection

Specify Drops, Cascade Drops on the check boxes

(Note which file you’ll create the backup in, or change it if you want it elsewhere)

Select “Next” button

Make sure all Object Types are selected, Select “Next button”

Enter HVK in the Name text box and click on the % checkbox.

All the object matching HVK% will appear on the left text box.

Press the “>>” button to select all the objects to operate on

Select “Next” button

(All data will be copied, so nothing to do on this screen)

Select “Next” button

Select “Finish”; the tool will then go off and backup your database into the SQL file.