DBA QUIZLET

1. Which of the following components is an integral software component that enables you to convert an unmanaged host to managed host in enterprise Manager System?

-Oracle Management Agent

2) To make the changes permanent: You must update the changes manually in initialization perimeter file.

3) For a small to medium enterprise, which database system installation? —Standard.

4) Which of the following storage structure include information that specifies the physical structure of the database. --- Control Files.

5) Which of the following command returns control to the use immediately if a table is already locked by another user?

--LOCK TABLE HR. EMPLOYESS IN SHARE MODE NOWAIT;

6) You find that created tablespace is initially a read/write tablespace. You need to add data files and temp files to it.

-- Use the ALTER TABLESPACE statement.

7) You are required to provide a graphical user interface to a distributed database.

----Cloud Control.

8) Which of the following are logical storage structures?

----Segment, Extent, Data block.

9) To create a password-mode encrypted backup of the database:

---SET ENCRPTION ON IDENTIFIED BY password ONLY.

10) Which of the following lock mode permits concurrent queries on table but prohibits update to a locked table?

---SHAREROWEXCULSIVE.

11) What are the primary reasons for creating incremental backup?

---It provides faster daily backups.

---It rolls forward data file copies reducing recovering time.

---It synchronizes physical standby database with the primary database.

12) How many consumer groups, CPU percentages, simple plans can the CREAT\_SIMPLE\_PLAN procedure create?

-8,8 and 1. (Only 1 plan).

13) For the background processes to be handled by multiple database programs running:

---FMON.

14) Need to specify some perimeter on CREATE\_PLAN procedure:

---PLAN, COMMENT.

15) To run executables that are external to the database on remote systems:

--Scheduler Agent.

16) To perform a backup and recovery with the host of operating system and sql plus commands: User-managed backup and Recovery.

17) SMON process: Performs recovery at instance start up and free space.

18) Parameter that has a maximum number of pooled servers in the pool: MAXSIZE

19) SQL command that drops a disk from the disk group:

---- ALTER DISKGROUP DROP DISK FRADISK\_OOO.

20) Specifies the location where the control file trace backup is sent: DIAGNOSTIC\_DEST.

21) Supports only single user and deployment environment: Personal Edition.

22) Dictionary- managed Tablespace: MINIMUM EXTENT.

23) Benefits of Temporary undo:

---Reduces the amount of undo, Reduces the amount of redo generated, Enables DML operations.

24) Alert Log = Contains information about the file crash.

25) Physical structure in database = Datafile and control file.

26) when to execute change failure RMAN command= To change the status of open failure to closed.

27) Where does the oracle server record changes made to the data for recovery operations:

--Redo log files.

28) To change the archiving mode of a database from NONARCHIVE Log mode to ARCHIVE log mode = Mount state.

29) To load data from external file into newly created database: SQL Loader.

30) To safeguard the database against potential failures: Create a full data backup in a closed database.

31) When a segment requires additional database, which logical database components would you add: Extents.

32) Which command line command can you use to determine the uptime duration of the default listener? = Lsnctrl status

33) To obtain information regarding the start up and shut down of the oracle database:

--alert\_orcl.log

34) Scheduler role: Job, Program and schedule.

35) Tablespace: It can contain multiple data files, each on separate disk.

36) Tool used to configure oracle database network: netmgr

37)To shrink space in Oracle database objects: Alter table and Alter Index.

38) Default setting for UNDO\_RETENTION perimeter: 900 seconds.

39) Which of the following is required to manage unified auditing in database:

---audit\_admin

40) To move external data into oracle database: Data Pump, SQL Loader and External Tables.

41) When creating a job, which procedure would you use to determine the values of specific arguments for that job:

--DBMS\_scheduler.set\_job\_attribute.

42) Where is database UNDO stored: The database undo tablespace.

43) A type of privilege that can be granted to oracle database user: Object and System.

44) Parameter that enables AUTOMATIC MEMORY MANAGEMENT: MEMORY\_TARGET.

45) To enable user to grant role to other users: with admin option.

46) Valid type of parameter files: Static and Dynamic perimeter file.

47) To automate an RMAN backup: Oracle Enterprise Manager.

48) To prioritize the execution of scheduler jobs over other scheduler jobs:

----Oracle Resource Manager.

49) Advantage of shrinking space: Reduce space usage and Improved performance.

50) Purpose of checkpoint: Reduce the amount of time and Flush dirty blocks from database.

51) Fast recovery area: RMAN backup files.

52) To extract data containing hundred of tables: Data Pump.

53) Private memory of oracle database process: PGA

54) To create a consistent database backup: shut down the database in a consistent mode before starting the backup.

55) Media failure: Physical Recovery

56) SQL statement that is performing slowly: SQL Tuning Advisor.

57) Sql command that does not generate undo: SELECT

58) Which command will drop a user and all of the objects the user own: drop user cascade;

59) To change the password of RSMITH user account:

---ALTER user RSMITH identified by new\_password;

60) To control the amount of time the UNDO data is retained: UNDO\_RETENTION.

61) To delete an Oracle database: Database Configuration Assistant.

62) Which command will force an instant recovery the next time database is started:

---shutdown abort.

63) which view would you query to determine if the database in ARCHIVELOG mode:

---V$DATABASE.

64) To set up the Fast Recovery Area: Determine the size.

65) To migrate between old and new oracle database: SQL Loader.

66) To perform a full database recovery: Recover and Restore Database.

**PRE-ASSESSMENT(52 Questions, 2hrs)**

1. To upgrade an Oracle 10 G to Oracle 12 database:

----Perform a direct upgrade using DBUA.

1. The table compression method that has the highest compression level:

--Archive compression.

3) An alert threshold that you can you can use to monitor a tablespace:

--Both warning and critical threshold.

4) which statement regarding lock is true?

---Alter SYSTEM

5) To allow user to connect to database: CONNECT user/password;

6) Benefits of multiple tablespaces:

--control disk space allocation, partial backup and recovery, control availability of data, improve storage.

7) which command line of expdp and impdp clients connect you to an existing job?

--ATTACH.

8) Difference between oracle instance and database: Instance has to do with memory and database is physical files.

9) Which situation does the data pump use external tables?

---Loading tables with partitions, tables with encrypted columns, tables with inactive triggers or clustered columns.

10) Which component is configured at database startup and cannot be dynamically managed?

--Redo log buffer.

11) If you create a job using create\_ job procedure, how many times can it be executed?

---Once

12) Name for a binary initialization file: Spfile

13) Which data dictionary view is used to view the current values of parameters?

---V$PARAMETER.

14) which allocation unit is the smallest ----data block.

15) In oracle database, user password is case sensitive, not the user itself.

**DATA SCIENCE PROJECT 1(CHAPTER 6)**

**Project Overview**

In this project, you will investigate a classic phenomenon from experimental psychology called the [Stroop Effect](https://en.wikipedia.org/wiki/Stroop_effect). You will learn a little bit about the experiment, create a hypothesis regarding the outcome of the task, then go through the task yourself. You will then look at some data collected from others who have performed the same task and will compute some statistics describing the results. Finally, you will interpret your results in terms of your hypotheses.

Prepare for this project with: [Statistics](https://classroom.udacity.com/nanodegrees/nd002/parts/0021345402/modules/458220420175460/lessons/4601188734/concepts/46251285610923).

**Why this Project?**

Statistics is a major component of data analysis, it allows you to investigate data and make inferences based on your observations. A foundation in statistics also allows you to be a consumer of analyses that others perform, and allows you to relate to the conclusions others have drawn from their investigations.

**What will I Learn?**

This project will review the basic concepts of statistics, including:

* How to identify components of an experiment
* How to use descriptive statistics to describe qualities of a sample
* How to set up a hypothesis test, make inferences from a sample, and draw conclusions based on the results

**Why is this Important to my Career?**

This project is focused on statistics, including designing an experiment and testing a hypothesis. Using statistics to draw valid conclusions about data is an important part of a data analyst's work. When you see a company release a new feature, what do you think went into the decisionmaking? Typically, a business has a goal they want to achieve - for Udacity, it may mean increased enrollments. We'd spend a long time user testing and A/B testing to make sure trials of potential products indicate we'd get the outcome we wanted.

**How do I Complete this Project?**

This project is connected with the [Introduction to Data Analysis](https://classroom.udacity.com/courses/ud170) course, but depending on your background knowledge, you may not need to take the whole class to complete this project.

**PROJECT 2 (chapter 3)**

**Introduction**

For the final project, you will conduct your own data analysis and create a file to share that documents your findings. You should start by taking a look at your dataset and brainstorming what questions you could answer using it. Then you should use pandas and NumPy to answer the questions you are most interested in, and create a report sharing the answers. You will not be required to use inferential statistics or machine learning to complete this project, but you should make it clear in your communications that your findings are tentative. This project is open-ended in that we are not looking for one right answer.

**Step One - Choose Your Data Set**

Click [this link](https://s3.amazonaws.com/video.udacity-data.com/topher/2018/July/5b57919a_data-set-options/data-set-options.pdf) (available in a Google doc [here](https://docs.google.com/document/d/e/2PACX-1vTlVmknRRnfy_4eTrjw5hYGaiQim5ctr9naaRd4V9du2B5bxpd8FEH3KtDgp8qVekw7Cj1GLk1IXdZi/pub?embedded=True)) to open a document with links and information about data sets that you can investigate for this project. You **must** choose one of these datasets to complete the project.

**Step Two - Get Organized**

Eventually you’ll want to submit your project (and share it with friends, family, and employers). Get organized before you begin. We recommend creating a single folder that will eventually contain:

* The **report** communicating your findings
* Any **Python code** you wrote as part of your analysis
* The **data set** you used (which you will not need to submit)

You may wish to use a Jupyter notebook, in which case you can submit both the code you wrote and the report of your findings in the same document. Otherwise, you will need to submit your report and code separately. If you would like a **notebook template** to help organize your investigation, you can click [here](https://s3.amazonaws.com/video.udacity-data.com/topher/2018/April/5ac7a08a_investigate-a-dataset-template.ipynb/investigate-a-dataset-template.ipynb.zip). Or there may be a page in the project here called *Project Workspace: Complete and Submit Project*, where you can do all your work and submit the project.

**Step Three - Analyze Your Data**

Brainstorm some questions you could answer using the data set you chose, then start answering those questions. You can find some questions in the [data set options](https://s3.amazonaws.com/video.udacity-data.com/topher/2018/July/5b57919a_data-set-options/data-set-options.pdf) to help you get started.

Try and suggest questions that promote looking at relationships between multiple variables. You should aim to analyze at least one dependent variable and three independent variables in your investigation. Make sure you use NumPy and pandas where they are appropriate!

**Step Four - Share Your Findings**

Once you have finished analyzing the data, create a report that shares the findings you found most interesting. If you use a Jupyter notebook, share your findings alongside the code you used to perform the analysis. Make sure that your report text is contained in Markdown cells to clearly distinguish your comments and findings from your code work. You should also feel free to use other tools and software to craft your final report, but make sure that you can submit your report as an HTML or PDF file so that it can be opened easily.

**Step Five - Review**

Use the [**Project Rubric**](https://review.udacity.com/#!/projects/3176718735/rubric) to review your project. If you are happy with your submission, then you're ready to submit your project. If you see room for improvement, keep working to improve your project!

Supporting Materials

[**Investigate-A-Dataset-Template.Ipynb**](https://video.udacity-data.com/topher/2018/April/5ac7a08a_investigate-a-dataset-template.ipynb/investigate-a-dataset-template.ipynb.zip)

[**Data Set Options**](https://video.udacity-data.com/topher/2018/July/5b57919a_data-set-options/data-set-options.pdf)

**DATA WRANGLING COURSE PROJECT**

**(CHAPTER 4)**

**Project Overview**

You will choose any area of the world in [https://www.openstreetmap.org](https://www.openstreetmap.org/) and use data munging techniques, such as assessing the quality of the data for validity, accuracy, completeness, consistency and uniformity, to clean the OpenStreetMap data for a part of the world that you care about. Finally, you will choose either MongoDB or SQL as the data schema to complete your project.

**What will I learn?**

After completing the project, you will be able to:

* Assess the quality of the data for validity, accuracy, completeness, consistency and uniformity.
* Parse and gather data from popular file formats such as .csv, .json, .xml, and .html
* Process data from multiple files or very large files that can be cleaned programmatically.
* Learn how to store, query, and aggregate data using MongoDB or SQL.

**Why this Project?**

What’s so hard about retrieving data from databases or various files formats? You grab some data from this file and that database, clean it up, merge it, and then feed it into your state of the art, deep learning algorithm … Right?

But the reality is this -- anyone who has worked with data extensively knows it is an absolute nightmare to get data from different data sources to play well with each other.

And this project will teach you all of the skills you need to deal with even the most nightmarish data wrangling scenarios.

**Why is this Important to my Career?**

The skills in this project are some of the most important for your career. Any data analyst will need to wrangle data before they can do any analysis. At Udacity, how would we know when students submit projects unless we made sure to report the timestamp? How would we be able to compare that to when students finish watching videos unless we built data pipelines to get all of this information in one place? Data analysts help with collecting and cleaning the data, or what is often called "data wrangling."

Data analysts and data scientists can spend 50%-80% of their time data wrangling. A huge benefit of this is that collecting and cleaning data means you will know the data very well, and be better prepared to analyze it.

**To Prepare for the Project**

**Step 1:** Complete the [Data Wrangling Course](https://classroom.udacity.com/nanodegrees/nd002/parts/0021345404/modules/316820862075460/lessons/491558559/concepts/8165990800923).

**Step 2:** Choose between MongoDB and SQL and complete the associated course

**For MongoDB, prepare for this project with:** [MongoDB For Data Analysis](https://classroom.udacity.com/nanodegrees/nd002/parts/173a2a8e-52c3-45b3-803a-ebd44a134b30/modules/316820862075462/lessons/745498943/concepts/7597386010923). (If this link does not work, you can find the MongoDB content in the Extracurricular section of the Nanodegree materials.)

**For SQL, prepare for this project with:** [SQL for Data Analysis](https://classroom.udacity.com/nanodegrees/nd002/parts/0021345404/modules/316820862075461/lessons/5391955257/concepts/77032743580923).

**Note**

If you have successfully completed the project for the Data Wrangling with MongoDB course in the past (which entails having graduated from the course and having access to your course certificate), simply email us at [dataanalyst-project@udacity.com](mailto:dataanalyst-project@udacity.com) with your passing evaluation and we'll give you credit for this project.

**DATA ANALYSIS WITH R COURSE PROJECT(chapter 5)**

**Project Overview**

In this project, you will use R and apply exploratory data analysis techniques in a selected dataset to discover relationships among multiple variables, and create explanatory visualizations illuminating distributions, outliers, and anomalies.

Prepare for this project with: [Data Analysis with R](https://classroom.udacity.com/courses/ud651).

**Note**

If you have successfully completed the project for the Data Analysis with R course in the past (which entails having graduated from the course and having access to your course certificate), simply email us at [dataanalyst-project@udacity.com](mailto:dataanalyst-project@udacity.com) with your passing evaluation and we'll give you credit for this project.

**What do I need to install?**

In order to complete the project, you will need to install R. You can download and [install R from the **C**omprehensive **R** **A**rchive **N**etwork (CRAN)](http://cran.r-project.org/).

After installing R, you will need to download and install [R Studio](http://www.rstudio.com/products/rstudio/download/). Choose the appropriate installation for your operating system.

Finally, you will need to install a few packages. We recommend opening R Studio and installing the following packages using the command line.

install.packages("ggplot2", dependencies = T)

install.packages("knitr", dependencies = T)

install.packages("dplyr", dependencies = T)

For more information on installing R packages, please refer to [Installing R Packages](http://www.r-bloggers.com/installing-r-packages/) on R Bloggers.

**Why this Project?**

Exploratory Data Analysis (EDA) is the numerical and graphical examination of data characteristics and relationships before formal, rigorous statistical analyses are applied.

EDA can lead to insights, which may uncover to other questions, and eventually predictive models. It also is an important “line of defense” against bad data and is an opportunity to notice that your assumptions or intuitions about a data set are violated.

**What will I learn?**

After completing the project, you will:

* Understand the distribution of a variable and to check for anomalies and outliers
* Learn how to quantify and visualize individual variables within a data set by using appropriate plots such as scatter plots, histograms, bar charts, and box plots
* Explore variables to identify the most important variables and relationships within a data set before building predictive models; calculate correlations, and investigate conditional means
* Learn powerful methods and visualizations for examining relationships among multiple variables, such as reshaping data frames and using aesthetics like color and shape to uncover more information

**Why is this Important to my Career?**

In this project, you learn skills to frame and present data. Data, by itself, is "ubiquitous and cheap," says Google's Chief Economist and UC Berkeley professor Hal Varian. What you do as a data analyst is take that data and turn it into insights.

When working on this project, think about the insights you're trying to provide. When speaking to an employer, this is what they want to first hear about.