

Homework 1

Overview: In this homework, you will demonstrate the successful creation and use of Amazon S3 buckets using AWS Management Console and the Cloud9 programming interface.

Assignment: Total 100 points, 17.5% of the overall class grade

Assignment Details:

Note: To be considered to receive credit for this assignment, you must use your assigned AWS Educate classroom.

1. (20 points) Using the AWS Management Console, create two (2) S3 buckets with DNS-compliant names of your choice. In each of the buckets create 2 folders named as follows:

- Jobs
- Support

Once you have created the buckets and folders, provide screen captures clearly demonstrating your successful completion of this step. Be sure to provide a figure number and title as well as a description of to describe the images. Your screen captures should clearly show the bucket named created and folders for each bucket.

2. (10 points) Using the AWS Management Console, copy 2 files (or your choice) to each of the 2 folders you created for your S3 buckets. (This means a total of 8 files will be moved to the S3 buckets.)

Once you have completed steps 1 and 2, provide screen captures clearly demonstrating your successful completion of these steps. Be sure to provide a figure number and title as well as a description of the screen captures. Your screen captures should clearly show the bucket names created, the folders residing in each bucket and the files sent to each folder.

3. (50 points) Using the Cloud9 IDE within your assigned AWS Educate classroom, write and provide documentation supporting a Python command line menu-driven interface application that performs the following AWS S3 functionality:

- a. Creates a S3 bucket with the name consisting of your firstname, lastname and a random 6-digit suffix. For example, the following would be a possible bucket name jimrobertson-321921.
- b. Puts objects in a previously created bucket.
- c. Deletes an object in a bucket.
- d. Deletes a bucket.
- e. Copies and object from one bucket to another.
- f. Downloads an existing object from a bucket.
- g. Exit the program. Upon exit, the application should list the date and time.

Hints:

- The menu should be launched from the AWS Cloud9 command line interface and contain options to perform each of the functionality listed above. (Review the Python textbook for basic functionality as needed)
- Use the code examples provided in the content area to cobble together the application
- Be sure to thoroughly test each function and document the results of your tests that include the input, expected output, actual output and if the test passed. Screen captures should be included with each test case.
- Document your code with comments and use small functions as opposed to larger main functions.

5. (20 points) Submit your documentation in Word or PDF format no later than the due date.

This includes the following Submission details:

1. Page numbers should be included for all pages (except the title page) and be at the top right of the page.
2. Paragraphs should be double-spaced with 1" margins on all sides.
3. 12 pt. Times New Roman font or similar should be used.
4. Figures should have titles and numbers.
5. The document should contain minimal spelling and grammar errors.
6. References are included (you should reference the code used) and provided in APA format.

Any submissions that do not represent work originating from the student will be submitted to the Dean's office and evaluated for possible academic integrity violations and sanctions.