# Scenario - Objects addition and replication rule creation

* Create a bucket (simulating source storage containing data)
  + Use ‘Create Bucket’ to create a bucket using the following configuration
    - Bucket Name
      * Example - ‘great-learning-training-source’
    - Use ‘us-east-1’ for ‘AWS Region’
    - Choose ‘Enable’ for Bucket Versioning
    - Use the default settings for the rest of the options
* Create another bucket (simulating destination storage containing data)
  + Use ‘Create Bucket’ to create a bucket using the following configuration
    - Bucket Name
      * Example - ‘great-learning-training-target’
    - Use ‘us-west-2’ for ‘AWS Region’
    - Choose ‘Enable’ for Bucket Versioning
    - Use the default settings for the rest of the options
* Create folders / files in the source bucket
  + Create two folders in the bucket
    - /courses
    - /students
  + Use AWS Cloud Shell to upload files to the bucket
    - Create the following files with some sample content
      * “Java-fsd-course.txt”
      * “react-js-course.txt”
    - Use the following commands to upload the files
      * “aws s3 cp java-fsd-course.txt s3://great-learning-training-source/courses/”
        + Note that after “courses”, specifying “/” is important to indicate that “courses” represent a folder
      * aws s3 cp react-js-course.txt s3://great-learning-training-source/courses/
  + Verify if the files are uploaded in the right path
* Define a Replication rule in the source bucket
  + On the source bucket, click the Management tab
  + Under the ‘Replication rules’ section, click ‘Create replication rule’
  + Specify a rule name ‘all-objects-replicate’
  + Make sure that the status is ‘Enabled’
  + Under the ‘Source Bucket’ section and for the option ‘Choose a rule scope’, make sure that ‘Apply to all the objects’ is selected
  + Under the ‘Destination’ section, make sure to select ‘Choose a bucket in this account’ and select the bucket ‘great-learning-training-target’
  + For the ‘IAM Role’, select ‘LabRole’
  + Leave the rest of the settings with its defaults and click ‘Save’
* Verification
  + Go to the target object and verify if the objects are replicated
  + Expectation
    - This is the expected outcome - as the objects won't be replicated because the rule got created after the objects were added
    - The created replication rule wont work on the existing objects

# Scenario - Objects Replication

* Ensure that the source and the target buckets are available
* Upload file in the source bucket using the following command
  + aws s3 cp data-science-course.txt s3://great-learning-training-source/courses/
  + Verify if the files are uploaded in the right path
* Verification
  + Go to the target object and verify if the objects are replicated
  + Expectation
    - The objects are replicated

# Scenario - Replication rule on select folders/prefix

* Ensure that the source and the target buckets are available
* For simplicity purpose, disable the following rule ‘all-objects-replicate’
  + Under Management Tab -> Replication Rules, select the rule
  + Actions -> Disable
* Create a new Replication rule in the source bucket with the following settings
  + Specify a rule name ‘replicate-students-objects-only’
  + Make sure that the status is ‘Enabled’
  + Under the ‘Source Bucket’ section and for the option ‘Choose a rule scope’, make sure that ‘Limit the scope of this rule using one or more filters’ is selected
  + For the Filter Type and for the ‘Prefix’ specify the value as “students”
  + Under the ‘Destination’ section, make sure to select ‘Choose a bucket in this account’ and select the bucket ‘great-learning-training-target’
  + For the ‘IAM Role’, select ‘LabRole’
  + Leave the rest of the settings with its defaults and click ‘Save’
* Upload files to ‘courses’ folder
  + In the AWS Cloudshell, upload files
    - aws s3 cp angular-js-course.txt s3://great-learning-training-source/courses/
  + Verify if the files are uploaded in the right path
* Verification
  + Go to the target object and verify if the new objects (i.e. angular-js-course.txt) are replicated
  + Expectation
    - The objects are not replicated
    - This is because the replication rule is defined on the ‘students’ folder only
* Upload files to ‘students’ folder
  + In the AWS Cloudshell, upload files
    - aws s3 cp rahul.txt s3://great-learning-training-source/students/
  + Verify if the files are uploaded in the right path
* Verification
  + Go to the target object and verify if the new objects (i.e. rahul.txt) are replicated
  + Expectation
    - The objects are replicated
    - This is expected, because the replication rule is defined on the ‘students’ folder