

## Module 9: Hands-On Code

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import time
import urllib.request, urllib.parse, urllib.error
import json
import os.path
import boto3
print('Function start (CloudWatch)')

s3 = boto3.client('s3')

def lambda_handler(event, context):
    source_bucket = event['Records'][0]['s3']['bucket']['name']
    key = urllib.parse.unquote_plus(event['Records'][0]['s3']['object']['key'])
    copy_source = {'Bucket':source_bucket, 'Key':key}

    #CloudWatch info
    print("Log stream name:", context.log_stream_name)
    print("Log group name:", context.log_group_name)
    print("Request ID:",context.aws_request_id)
    print('Start of Try')

    #Logic
    try:
        waiter = s3.get_waiter('object_exists')
        waiter.wait(Bucket=source_bucket, Key=key)

    #get the file extension
    extension = os.path.splitext(key)[1]

    #copy from s3 to s3
    if extension==".png":
        s3.copy_object(Bucket="lambdabucketimage", Key=key, CopySource=copy_source)
    if extension==".pdf":
        s3.copy_object(Bucket="lambdabucketpdf", Key=key, CopySource=copy_source)
    if extension==".txt":
        s3.copy_object(Bucket="lambdabucketttext", Key=key, CopySource=copy_source)
```

except Exception as e:

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    print(e)
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    print('Error while trying to copy the file. Does not exist'.format(key, source_bucket))
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    raise e
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```
print('End of function')
```