

Exercise: AWS SDK - Typescript

In this exercise you will write a Typescript program that uses the AWS SDK to copy a local file into an S3 bucket. It should be possible to run your program as follows:

```
> ts-node s3copy.ts <local-file-name> <s3-bucket-name>
```

Assumptions

You have already configured your AWS credentials on your computer. This should have been done when you installed the AWS CLI on your computer.

Node.js and ts-node are installed on your computer.

Steps

1. Create and initialize a new Node.js Typescript project
2. Install the AWS SDK

```
> npm install --save aws-sdk
```
3. Create a Typescript file containing the following code:

```
// import the S3 class from the AWS SDK
import { S3 } from 'aws-sdk';

// import the file system functions from the Node.js SDK
import * as fs from 'fs';

// Create S3 object for doing S3 operations
let s3 = new S3();

// Write code to do the following:
// 1. get name of file to be copied from the command line
// 2. get name of S3 bucket from the command line
// 3. load contents of local file into a variable
// 4. copy file contents to the specified S3 bucket using the original file name as key
```

4. The online documentation for the Node.js Javascript API can be found here:
 - a. <https://nodejs.org/api/index.html>
 - b. Look for functions that let you read a file

5. The online documentation for the AWS Javascript SDK can be found here:
 - a. <https://docs.aws.amazon.com/AWSJavaScriptSDK/latest/>
 - b. Look at the documentation for the S3 class
6. Test your program by using it to copy some local files into an S3 bucket in your AWS account.
7. Submit your Typescript code through Canvas.

More Information

The full AWS SDK documentation can be found here in the SDKs section:
<https://aws.amazon.com/tools/>