Task definition

Objective:

Develop a Go program that performs the following actions:

1. Scan a given source directory for all its files.
2. Copy each file to a destination directory after encrypting its content.
3. Compute a hash value for each of the encrypted files and store it in a key-value pair, path of the file being the key and hash as its value.
4. Given a file path, check the integrity of the encrypted file using the hash value stored earlier and then decrypt the file content to a given location.

Additional inputs:

1. Use any cryptographic and hashing algorithm you find fit.
2. Use simple text files during development, but the program should work for binary content as well.
3. The source directory could be any level deep and could have hundreds of files. Using goroutines and channels is preferred.

Once you submit the completed program, we will schedule a call and do a code walkthrough and see how some additional scenarios would impact the program and how you will be addressing them.