

DAY 28::

ASSIGNMENT 3::

Task 3: Proxy

Create a proxy class for accessing a sensitive object that contains a secret key. The proxy should only allow access to the secret key if a correct password is provided.

ANS:

```
public class SecretKeyProxy {  
    private final String secretKey;  
    private final String password;  
  
    public SecretKeyProxy(String secretKey, String password) {  
        this.secretKey = secretKey;  
        this.password = password;  
    }  
  
    public String getSecretKey(String inputPassword) {  
        if (inputPassword.equals(password)) {  
            return secretKey;  
        } else {  
            throw new SecurityException("Incorrect password");  
        }  
    }  
}  
  
public static void main(String[] args) {  
    // Example usage  
    String secretKey = "mySecretKey";  
    String password = "myPassword";  
    SecretKeyProxy proxy = new SecretKeyProxy(secretKey, password);  
  
    // Attempt to access the secret key
```

```
try {  
    String inputPassword = "myPassword";  
    String retrievedKey = proxy.getSecretKey(inputPassword);  
    System.out.println("Secret key: " + retrievedKey);  
} catch (SecurityException e) {  
    System.out.println("Error: " + e.getMessage());  
}  
  
// Attempt to access the secret key with incorrect password  
try {  
    String inputPassword = "wrongPassword";  
    String retrievedKey = proxy.getSecretKey(inputPassword);  
    System.out.println("Secret key: " + retrievedKey);  
} catch (SecurityException e) {  
    System.out.println("Error: " + e.getMessage());  
}  
}  
}
```