

## **Test Plan recording**

### **1. File reading test:**

- Verify that the program correctly reads the contents of an existing file.
- Check that the program correctly handles the case where the file does not exist.

### **2. File write test:**

- Verify that the program writes correctly to an existing file.
- Verify that the program creates a new file if the file does not exist.
- Check that the program correctly handles write errors in the file.

### **3. General testing:**

- Verify that the program runs without error and that read and write operations are performed correctly.
- Check that the program works with different types of files (eg large files, empty files, files with special characters).

### **4. Performance test:**

- Verify that the program can handle large files efficiently.
- Check that the program does not consume too many system resources during execution.

### **5. Safety testing:**

- Verify that the program is not writing sensitive or malicious data to a file.
- Verify that the program correctly handles security errors related to file permissions.