

Assignment 5: Modify the script to handle errors, such as the directory already existing or lacking permissions to create files.

Add a debugging mode that prints additional information when enabled.

```
#!/bin/bash
```

```
DEBUG=false
```

```
log_debug() {  
    if [ "$DEBUG" = true ]; then  
        echo "[DEBUG] $1"  
    fi  
}
```

```
handle_error() {  
    echo "Error: $1"  
    exit 1  
}
```

```
create_files() {  
    local dir_name="TestDir"  
  
    if [ -d "$dir_name" ]; then  
        log_debug "Directory '$dir_name' already exists."  
    else  
        mkdir "$dir_name" || handle_error "Failed to create directory '$dir_name'. Check permissions."  
        log_debug "Directory '$dir_name' created."  
    fi  
  
    cd "$dir_name" || handle_error "Failed to enter directory '$dir_name'. Check permissions."  
    log_debug "Entered directory '$dir_name'."
```

```
for i in {1..10}; do
    local filename="File$i.txt"
    echo "$filename" > "$filename" || handle_error "Failed to create file '$filename'. Check
permissions."
    log_debug "File '$filename' created with content."
done

echo "10 files created in the '$dir_name' directory with their names as content."
}

if [ "$1" = "--debug" ]; then
    DEBUG=true
    log_debug "Debugging mode enabled."
fi

create_files
```