***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.*

***Here's the modified Bash script with error handling and debugging mode:***

*Bash*

*#!/bin/bash*

*# Set debugging mode (0 = off, 1 = on)*

*DEBUG=0*

*# Directory and file names*

*DIR\_NAME="TestDir"*

*FILE\_PREFIX="File"*

*FILE\_SUFFIX=".txt"*

*# Create directory*

*if mkdir "$DIR\_NAME" 2>/dev/null; then*

*echo "Directory '$DIR\_NAME' created successfully."*

*if [ $DEBUG -eq 1 ]; then echo "Debug: Directory creation successful."; fi*

*else*

*case $? in*

*13) echo "Error: Lack of permissions to create directory '$DIR\_NAME'."; exit 1;;*

*1) echo "Error: Directory '$DIR\_NAME' already exists."; exit 1;;*

*\*) echo "Error: Unknown error creating directory '$DIR\_NAME' ($?)."; exit 1;;*

*esac*

*fi*

*# Create files*

*for i in {1..10}; do*

*filename="${FILE\_PREFIX}${i}${FILE\_SUFFIX}"*

*if echo "$filename" > "$DIR\_NAME/$filename"; then*

*if [ $DEBUG -eq 1 ]; then echo "Debug: File '$filename' created successfully."; fi*

*else*

*echo "Error: Failed to create file '$filename' ($?)."*

*exit 1*

*fi*

*done*

*echo "Files created successfully."*

***Enabling Debugging Mode:***

1. *To enable debugging mode, set DEBUG=1 at the top of the script.*
2. *Error Handling:*
3. *The script handles the following errors:*
4. *Directory already exists (Error code 1)*
5. *Lack of permissions to create directory (Error code 13)*
6. *Unknown errors creating directory or files*

***How to Run:***

1. *Open a text editor (e.g., Nano, Gedit).*
2. *Copy and paste the script.*
3. *Save the file (e.g., create\_dir\_files.sh).*
4. *Open the terminal.*
5. *Navigate to the directory where you saved the file.*
6. *Make the script executable: chmod +x create\_dir\_files.sh*
7. *Run the script: ./create\_dir\_files.sh*