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.

```
vijaysharma@VegyalapuVijay:~$ # Set debugging mode (0 for off, 1 for on)
vijaysharma@VegyalapuVijay:~$ DEBUG=1
vijaysharma@VegyalapuVijay:~$ # Function to print debug messages
vijaysharma@VegyalapuVijay:~$ debug() {
> if [$DEBUG -eq 1]; then
> echo "DEBUG: $1"
> fi
> }
vijaysharma@VegyalapuVijay:~$ # Create a directory named TestDirNew
vijaysharma@VegyalapuVijay:~$ if mkdir -p TestDirNew 2>/dev/null; then
> debug "Directory 'TestDirNew' created or already exists."
else
> echo "Error: Unable to create directory 'TestDirNew'. Check permissions."
> exit 1
> fi
DEBUG: Directory 'TestDirNew' created or already exists.
vijaysharma@VegyalapuVijay:~$ # Change to the TestDirNew directory
vijaysharma@VegyalapuVijay:~$ if cd TestDirNew; then
> debug "Changed to directory 'TestDirNew'."
> else
> echo "Error: Unable to change to directory 'TestDirNew'. Check permissions."
> exit 1
> fi
DEBUG: Changed to directory 'TestDirNew'.
vijaysharma@VegyalapuVijay:~/TestDirNew$ # Loop to create 10 files
```

```
vijaysharma@VegyalapuVijay:~/TestDirNew$ for i in {1..10}; do
> filename="File$i.txt"
> if echo "$filename" > "$filename" 2>/dev/null; then
> debug "File '$filename' created with content '$filename'."
> else
> echo "Error: Unable to create file '$filename'. Check permissions."
> exit 1
> fi
> done
DEBUG: File 'File1.txt' created with content 'File1.txt'.
DEBUG: File 'File2.txt' created with content 'File2.txt'.
DEBUG: File 'File3.txt' created with content 'File3.txt'.
DEBUG: File 'File4.txt' created with content 'File4.txt'.
DEBUG: File 'File5.txt' created with content 'File5.txt'.
DEBUG: File 'File6.txt' created with content 'File6.txt'.
DEBUG: File 'File7.txt' created with content 'File7.txt'.
DEBUG: File 'File8.txt' created with content 'File8.txt'.
DEBUG: File 'File9.txt' created with content 'File9.txt'.
DEBUG: File 'File10.txt' created with content 'File10.txt'.
vijaysharma@VegyalapuVijay:~/TestDirNew$ echo "Files created successfully in TestDirNew."
Files created successfully in TestDirNew.
----: command not found
vijaysharma@VegyalapuVijay:~/TestDirNew$
```