

- ❖ **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.

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

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

create_files() {
    for ((i=1; i<=10; i++)); do
        filename="File$i.txt";
        debug "Creating file: $filename";
        echo "$filename" > "$filename" || handle_error "Unable to
create $filename";
    done
}

main() {
    if [ "$DEBUG_MODE" = true ]; then
        echo "Debugging mode enabled.";
    fi
    if [ ! -d "TestDir1" ]; then
        mkdir TestDir1 || handle_error "Unable to create
directory TestDir";
        debug "Directory TestDir created"
    else
        handle_error "Directory TestDir1 already exists";
    fi
    cd TestDir1 || handle_error "Unable to navigate to
directory TestDir",
    create_files
    echo "Files created successfully in TestDir1.";
}

if [ "$1" = "-d" ]; then
    DEBUG_MODE=true;
fi
main
```

```
DESKTOP_DOWNLOADS_Rahul_TestDir_assignment1.txt_class.txt_rahul.txt
rahul@DESKTOP-TAR1F8I:~$ debug() {
> if [ "$DEBUG_MODE" = true ]; then
>     echo "DEBUG: $1";
> fi
> }
rahul@DESKTOP-TAR1F8I:~$ handle_error() {
> echo "Error: $1";
> exit 1
> }
rahul@DESKTOP-TAR1F8I:~$ create_files() {
> for ((i=1; i<=10; i++)); do
>     filename="File$i.txt";
>     debug "Creating file: $filename";
>     echo "$filename" > "$filename" || handle_error "Unable to create $filename";
> done
> }
rahul@DESKTOP-TAR1F8I:~$ main() {
> if [ "$DEBUG_MODE" = true ]; then
>     echo "Debugging mode enabled.";
> fi
> if [ ! -d "TestDir1" ]; then
>     mkdir TestDir1 || handle_error "Unable to create directory TestDir";
>     debug "Directory TestDir created"
> else
>     handle_error "Directory TestDir1 already exists";
> fi
> cd TestDir1 || handle_error "Unable to navigate to directory TestDir",
> create_files
> echo "Files created successfully in TestDir1.";
> }
rahul@DESKTOP-TAR1F8I:~$ if [ "$1" = "-d" ]; then
>     DEBUG_MODE=true;
> fi
rahul@DESKTOP-TAR1F8I:~$ main
Files created successfully in TestDir1.
rahul@DESKTOP-TAR1F8I:~/TestDir1$
```