

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.

ANS:

Set debugging mode (0 for off, 1 for on)

DEBUG=1

Function to print debug messages

```
debug() {  
    if [ $DEBUG -eq 1 ]; then  
        echo "DEBUG: $1"  
    fi  
}
```

Create a directory named TestDirNew

```
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
```

Change to the TestDirNew directory

```
if cd TestDirNew; then  
    debug "Changed to directory 'TestDirNew'. "  
else  
    echo "Error: Unable to change to directory 'TestDirNew'. Check permissions."  
    exit 1  
fi
```

Loop to create 10 files

```
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
```

echo "Files created successfully in TestDirNew."

ScreenShort:

```

~/komal2/TestDirOld/komal$ # Set debugging mode (0 for off, 1 for on)
~/komal2/TestDirOld/komal$ DEBUG=1
~/komal2/TestDirOld/komal$
~/komal2/TestDirOld/komal$ # Function to print debug messages
~/komal2/TestDirOld/komal$ debug() {
>   if [ $DEBUG -eq 1 ]; then
>     echo "DEBUG: $1"
>   fi
> }
~/komal2/TestDirOld/komal$ # Create a directory named TestDirNew
~/komal2/TestDirOld/komal$ 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.
~/komal2/TestDirOld/komal$
~/komal2/TestDirOld/komal$ # Change to the TestDirNew directory
~/komal2/TestDirOld/komal$ 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'.
~/komal2/TestDirOld/komal/TestDirNew$
~/komal2/TestDirOld/komal/TestDirNew$ # Loop to create 10 files

DEBUG: Changed to directory 'TestDirNew'.
~/komal2/TestDirOld/komal/TestDirNew$
~/komal2/TestDirOld/komal/TestDirNew$ # Loop to create 10 files
~/komal2/TestDirOld/komal/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'.
~/komal2/TestDirOld/komal/TestDirNew$
~/komal2/TestDirOld/komal/TestDirNew$ echo "Files created successfully in TestDirNew."
Files created successfully in TestDirNew.
~/komal2/TestDirOld/komal/TestDirNew$ ls
File1.txt File10.txt File2.txt File3.txt File4.txt File5.txt File6.txt File7.txt File8.txt File9.txt
~/komal2/TestDirOld/komal/TestDirNew$

```

Activate Windows
Go to Settings to activate Windows.

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