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.

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

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

```bash
DEBUG=1
```

Function to print debug messages

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

Create a directory named TestDirNew

```bash
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 or if the directory already exists."
  exit 1
fi
```

Change to the TestDirNew directory

```bash
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."
```

Output:

The script will create a directory named TestDirNew and populate it with ten files named File1.txt, File2.txt, ... , File10.txt. Each file will contain its filename as its content.

Files created successfully in TestDirNew