1. INSTALLING A PACKAGE   WITHOUT USING HANDLERS - WHEN ONLY
2. COPYING A LIST OF FILES FROM CONTROLLER TO HOST USING LOOP
3. RESTART THE SERVICE OF THE INSTALLED PACKAGE

```yaml
Day 4 > roles > web > tasks > 📄 main.yml
  1      - name: Install Latest Apache
  2        package:
  3          name: "{{ package_name }}"
  4          state: latest
  5        register: apache_install_result
  6        changed_when : true
  7
  8      - name: CopyingFiles
  9        copy:
 10          src: "{{ item }}"
 11          dest: "/var/www/html/{{ item }}"
 12        loop: "{{ file_list }}"
 13        when: apache_install_result.changed
 14
 15      - name: Restart Apache
 16        service:
 17          name: "{{ package_name }}"
 18          state: restarted
 10
```

```
mohamedamr@mohamedamr:~/ansible/Day 4$ ansible-playbook iti-playbook.yml

PLAY [play1] ********************************************************************

TASK [Gathering Facts] *********************************************************
ok: [52.56.166.196]

TASK [web : Install Latest Apache] *********************************************
changed: [52.56.166.196]

TASK [web : CopyingFiles] ******************************************************
changed: [52.56.166.196] => (item=index.html)
ok: [52.56.166.196] => (item=style.css)
ok: [52.56.166.196] => (item=script.js)

TASK [web : Restart Apache] ****************************************************
changed: [52.56.166.196]

PLAY RECAP *********************************************************************
52.56.166.196              : ok=4    changed=3    unreachable=0    failed
```

Ansible Lab 4 - USING WHEN ONLY

1. INSTALLING A PACKAGE   USING HANDLERS
2. COPYING A LIST OF FILES FROM CONTROLLER TO HOST USING LOOP
3. RESTART THE SERVICE OF THE INSTALLED PACKAGE

Day 4 > roles > web > tasks > 📄 main.yml
```yaml
1    - name: Install Latest Apache
2      package:
3        name: "{{ package_name }}"
4        state: latest
5      notify: CopyingFiles
6      changed_when: true
```

Day 4 > roles > web > handlers > 📄 main.yml
```yaml
1    - name: CopyingFiles
2      copy:
3        src: "{{ item }}"
4        dest: "/var/www/html/{{ item }}"
5      loop : "{{file_list}}"
6      notify: Restart Apache
7
8    - name: Restart Apache
9      service:
10       name: "{{ package_name }}"
11       state: restarted
```

Day 4 > roles > web > vars > 📄 main.yml
```yaml
1    package_name: "apache2"
2    file_list:
3        - index.html
4        - style.css
5        - script.js
```

```
PLAY [play1] ****************************************************************************

TASK [Gathering Facts] ******************************************************************
ok: [52.56.166.196]

TASK [web : Install Latest Apache] ******************************************************
changed: [52.56.166.196]

RUNNING HANDLER [web : CopyingFiles] ****************************************************
changed: [52.56.166.196] => (item=index.html)
ok: [52.56.166.196] => (item=style.css)
ok: [52.56.166.196] => (item=script.js)

RUNNING HANDLER [web : Restart Apache] **************************************************
changed: [52.56.166.196]

PLAY RECAP ******************************************************************************
52.56.166.196              : ok=4    changed=3    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
```

← → C   ⚠ Not secure | 52.56.166.196

Ansible Lab 4 - USING HANDLERS

1. INSTALLING A PACKAGE   USING HANDLERS & TEMPLATES
2. COPYING A LIST OF FILES FROM CONTROLLER TO HOST USING LOOP
3. RESTART THE SERVICE OF THE INSTALLED PACKAGE

Day 4 > 📄 iti-playbook.yml
```
1   ---
2   - name: play1
3     hosts: web_servers
4     roles:
5       - web
```

Day 4 > roles > web > vars > 📄 main.yml
```
1   template_name : "html_template"
2   myMessage : "Lab 4 - TEMPLATES & HANDLERS"
3   package_name: "apache2"
4   file_list:
5     - style.css
6     - script.js
```

Day 4 > roles > web > tasks > 📄 main.yml
```
1   - name: Install Latest Apache
2     package:
3       name: "{{ package_name }}"
4       state: latest
5     notify: "{{template_name}}"
6     changed_when: true
```

```yaml
 1   - name: "{{ template_name }}"
 2     template:
 3       src: index.html.j2
 4       dest: "/var/www/html/index.html"
 5     notify: CopyingFiles
 6
 7   - name: CopyingFiles
 8     copy:
 9       src: "{{ item }}"
10       dest: "/var/www/html/{{ item }}"
11     loop: "{{ file_list }}"
12     notify: Restart Apache
13
14   - name: Restart Apache
15     service:
16       name: "{{ package_name }}"
17       state: restarted
```

```html
 1   <!DOCTYPE html>
 2   <html lang="en">
 3   <head>
 4       <meta charset="UTF-8">
 5       <meta name="viewport" content="width=device-width, initial-scale=1.0">
 6       <title>ANSIBLE LAB 4</title>
 7
 8       <!-- Link to your CSS file -->
 9       <link rel="stylesheet" type="text/css" href="style.css">
10
11       <!-- Include your JavaScript file -->
12       <script src="script.js"></script>
13   </head>
14   <body>
15       <h1>{{myMessage}}</h1>
16   </body>
17   </html>
```

```
● mohamedamr@mohamedamr:~/ansible/Day 4$ ansible-playbook iti-playbook.yml

PLAY [play1] *********************************************************************

TASK [Gathering Facts] **********************************************************
ok: [52.56.166.196]

TASK [web : Install Latest Apache] **********************************************
changed: [52.56.166.196]

RUNNING HANDLER [web : html_template] *******************************************
changed: [52.56.166.196]

RUNNING HANDLER [web : CopyingFiles] ********************************************
ok: [52.56.166.196] => (item=style.css)
ok: [52.56.166.196] => (item=script.js)

PLAY RECAP **********************************************************************
52.56.166.196              : ok=4    changed=2    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
```

← → C ⚠ Not secure | 52.56.166.196

Lab 4 - TEMPLATES & HANDLERS