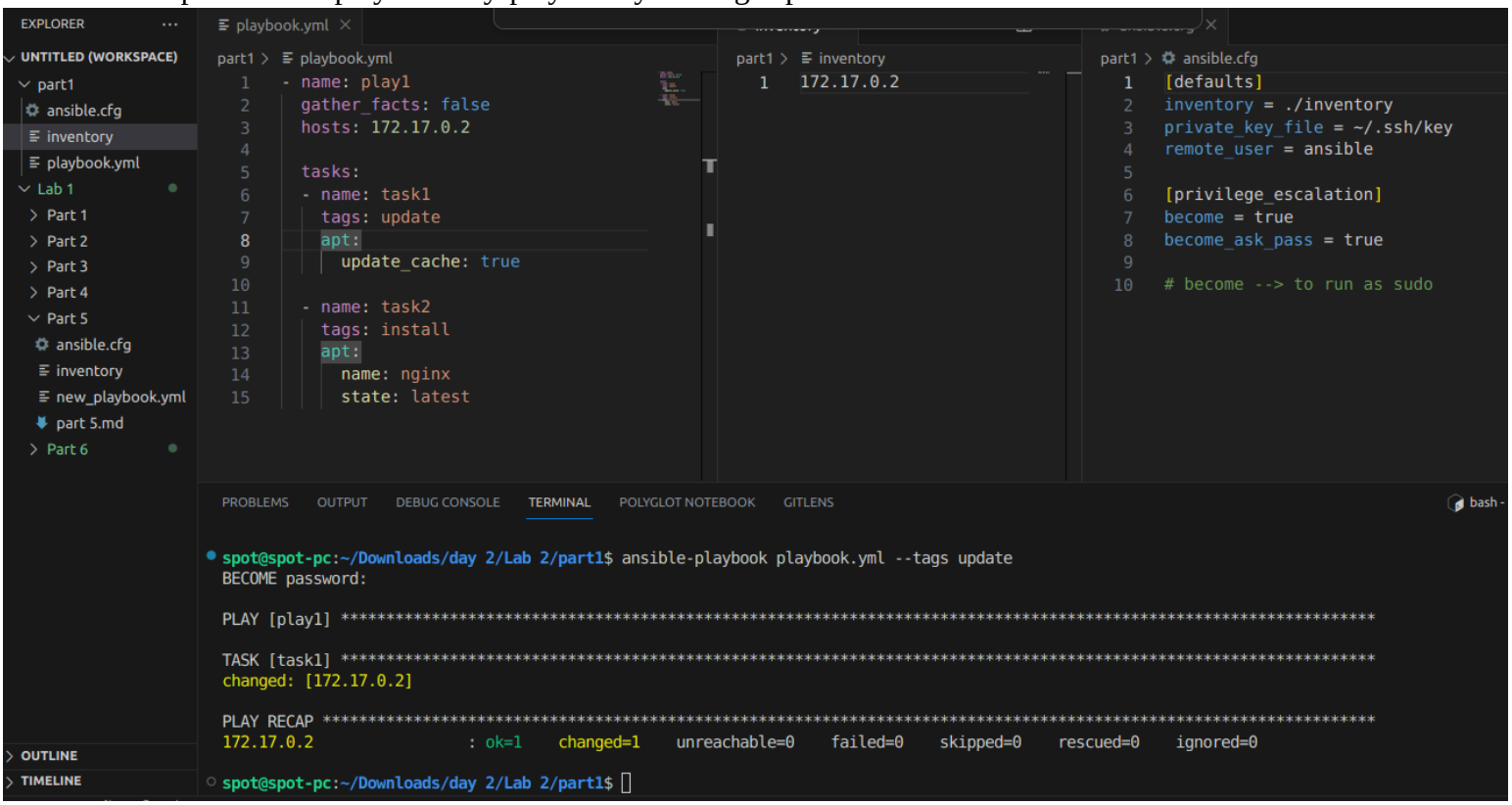
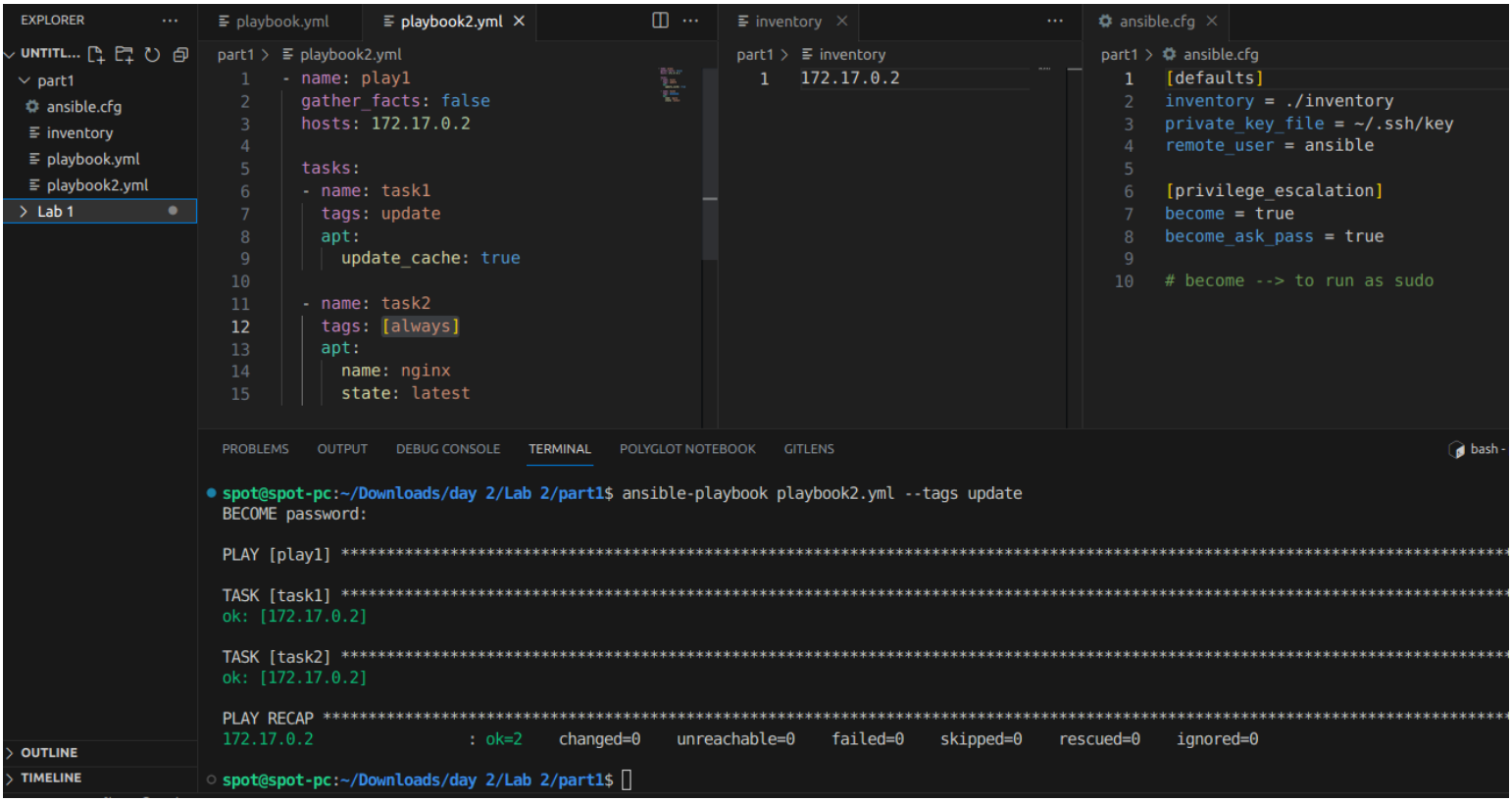
Part 1: Tags

- Write simple playbook file
- Add two tasks (apt update – apt install nginx)
- Add tags to first task: update
- Add tags to second task: install
- Run only the (apt update) task
- Example: ansible-playbook my-playbook.yml --tags update

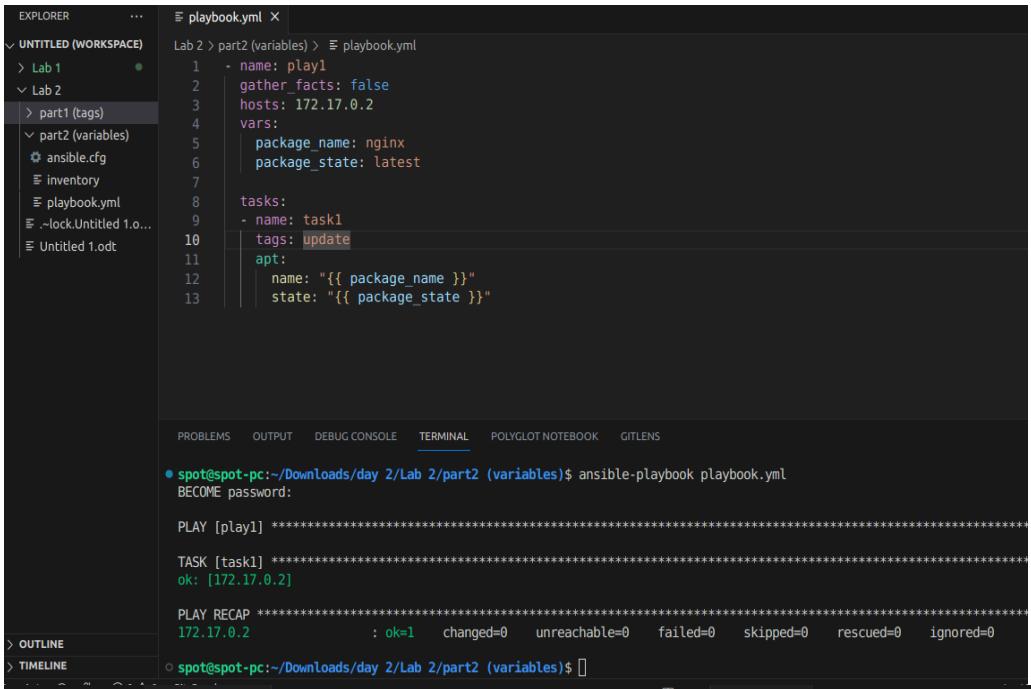


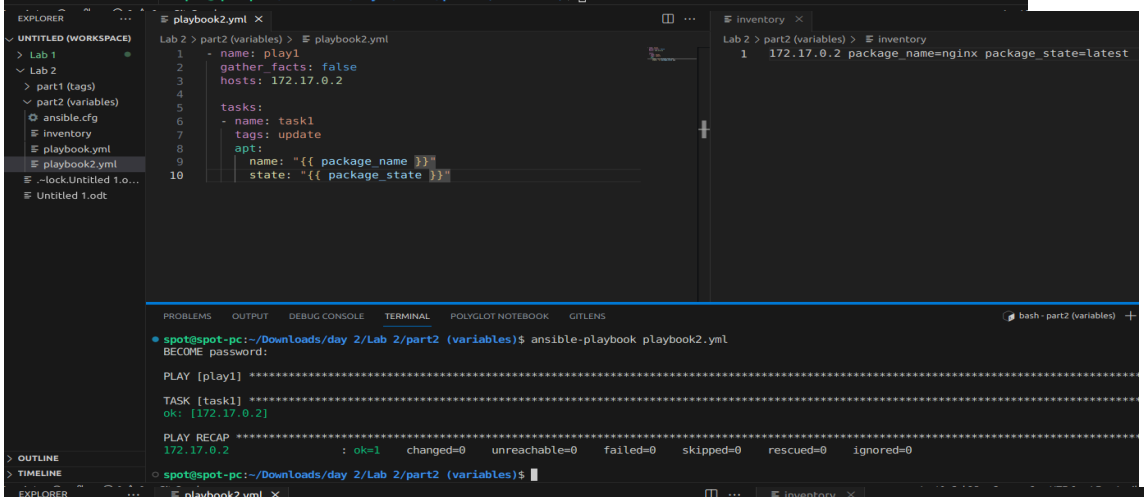
- Add one task with “tags: always” and run the previous command again

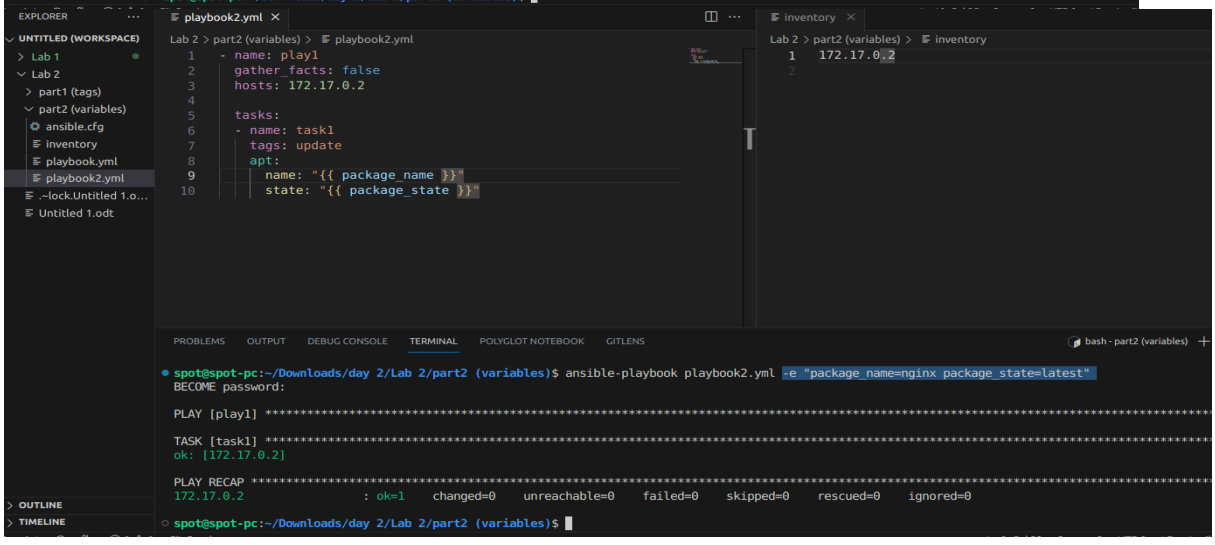


Part 2: Variables

- Define these variables (package_name, package_version)
  - on playbook level
  - on inventory level
  - on command line level
- Use apt module with the package name and version from your variables

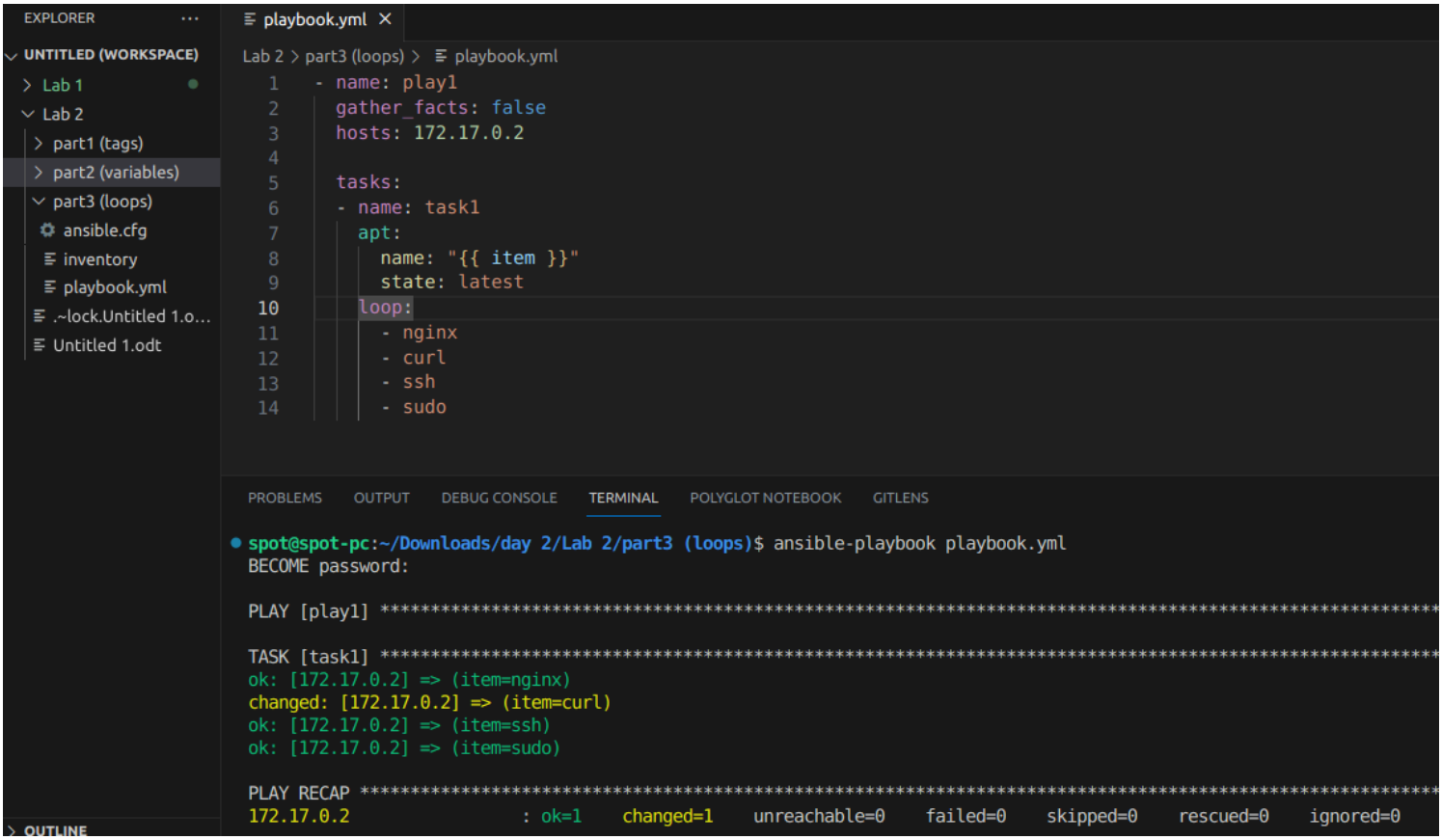


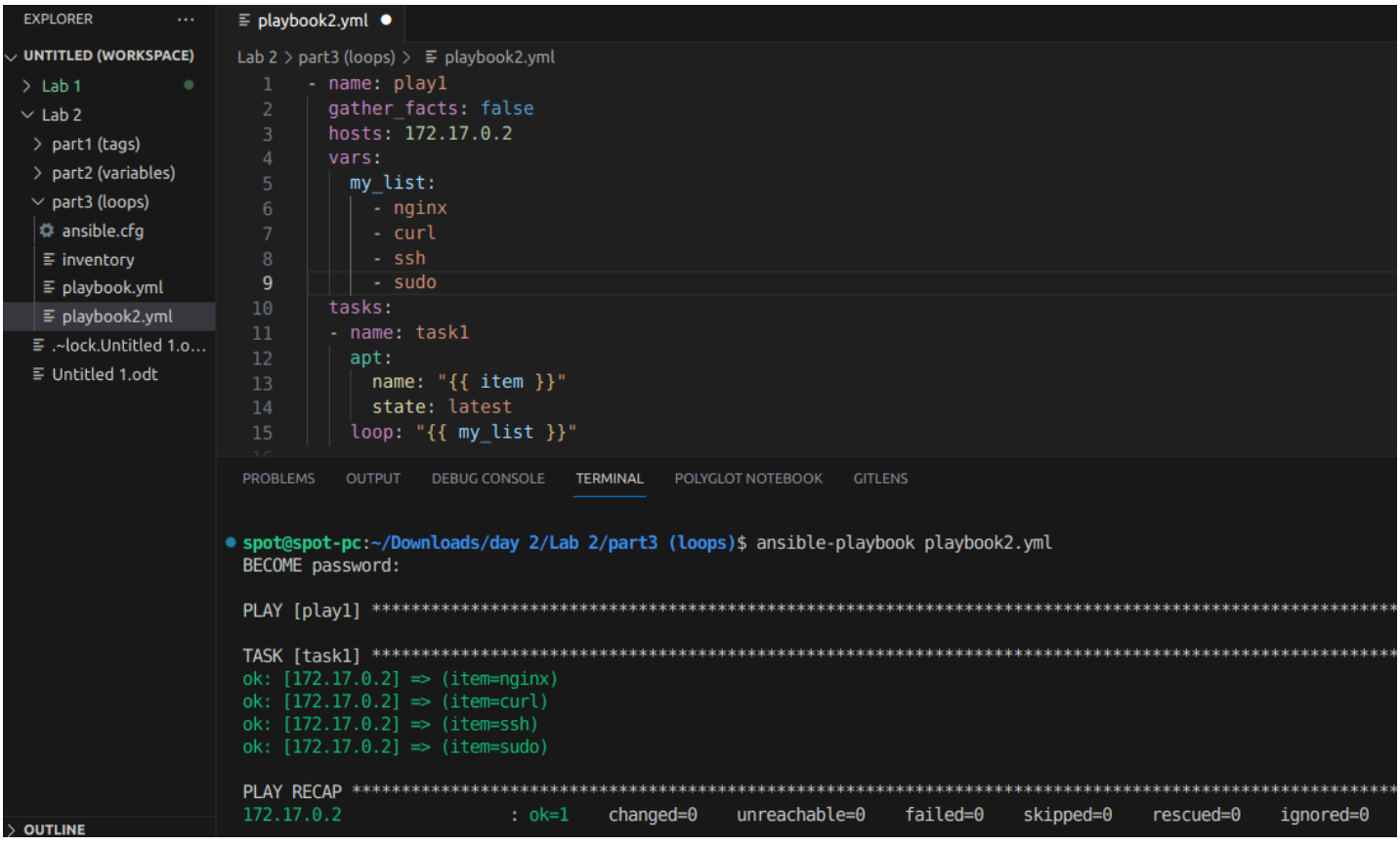




Part 3: Loops

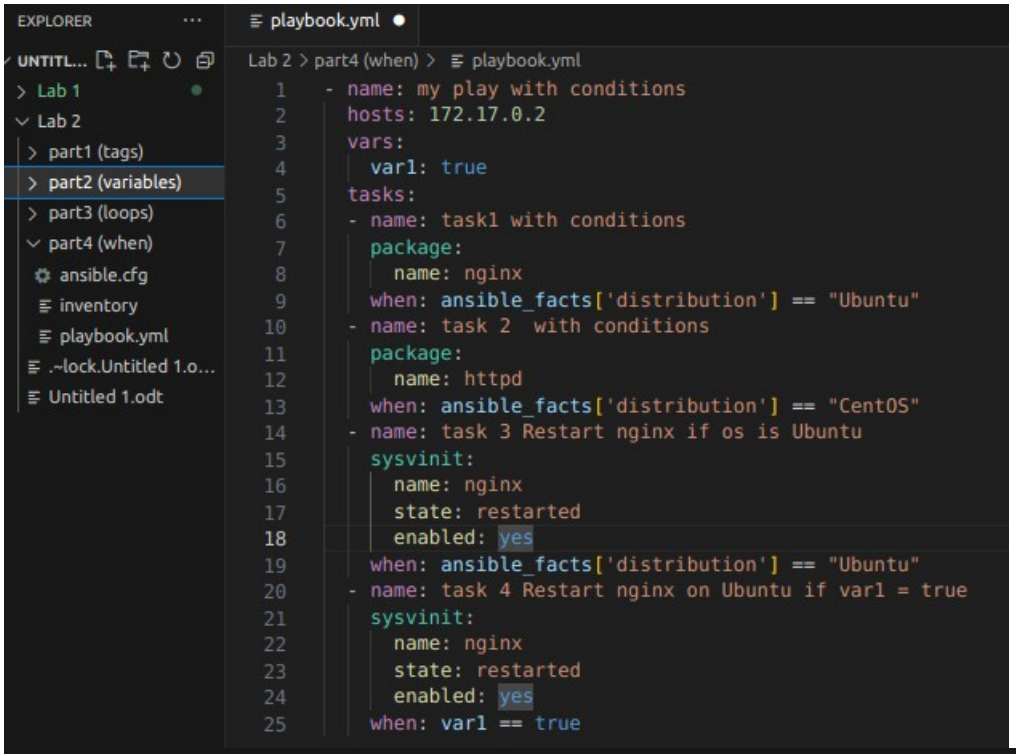
- Loop over a list of packages and install latest versions.
- Loop over a list of packages and perform different actions as per input.





Part 4: When

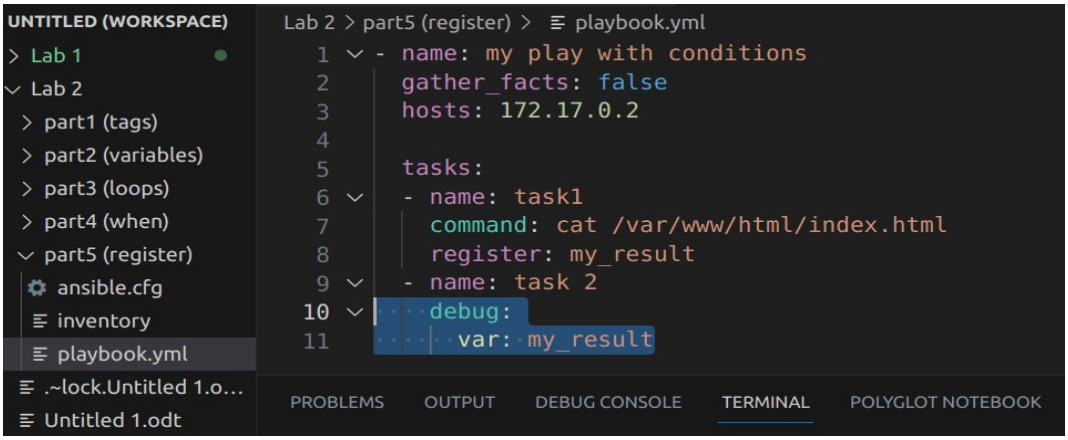
- Install nginx or apache2 depending on distribution
- Restart nginx service if distribution is ubuntu and variable value is true

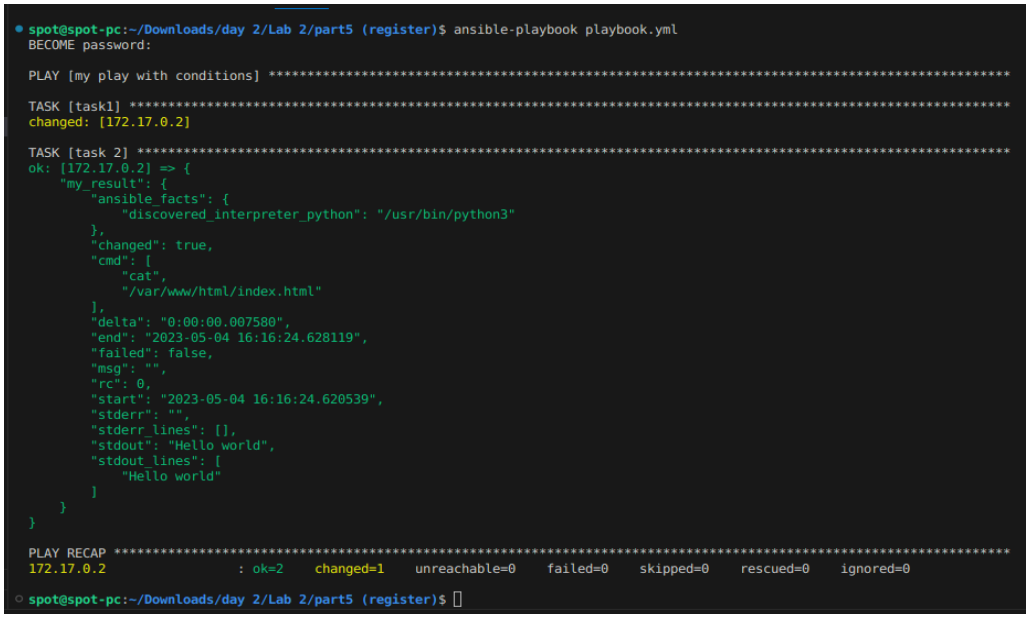



```
spot@spot-pc:~/Downloads/day 2/Lab 2/part4 (when)$ ansible-playbook playbook.yml
BECOME password:

PLAY [my play with conditions] ************************************************************************************************************************************************

TASK [Gathering Facts] ********************************************************************************************************************************************************
ok: [172.17.0.2]

TASK [task1 with conditions] **************************************************************************************************************************************************
ok: [172.17.0.2]

TASK [task 2  with conditions] ************************************************************************************************************************************************
skipping: [172.17.0.2]

TASK [task 3 Restart nginx if os is Ubuntu] ***********************************************************************************************************************************
changed: [172.17.0.2]

TASK [task 4 Restart nginx on Ubuntu if var1 = true] **************************************************************************************************************************
changed: [172.17.0.2]

PLAY RECAP ********************************************************************************************************************************************************************
172.17.0.2                 : ok=4    changed=2    unreachable=0    failed=0    skipped=1    rescued=0    ignored=0

spot@spot-pc:~/Downloads/day 2/Lab 2/part4 (when)$
```

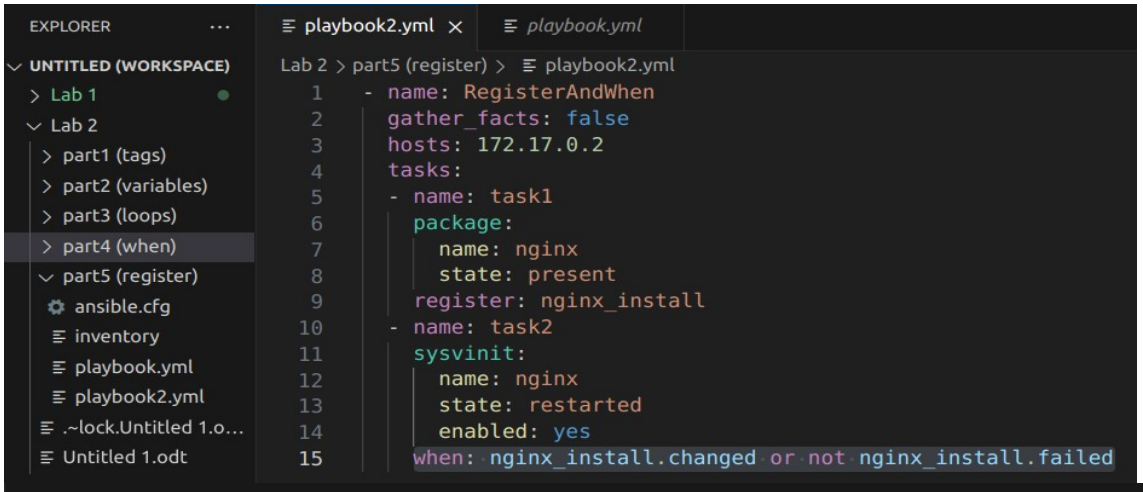
Part 5: Register & When

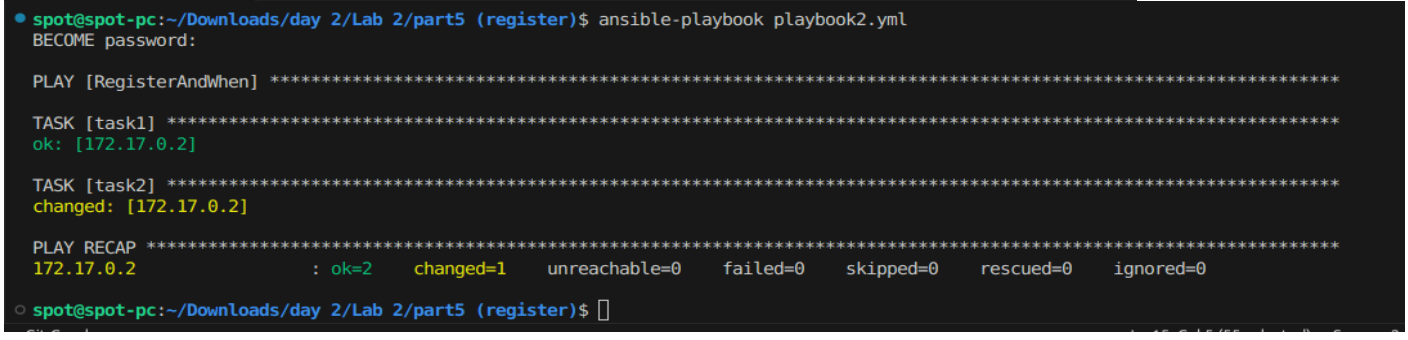
- View the value of your register variable using debug module



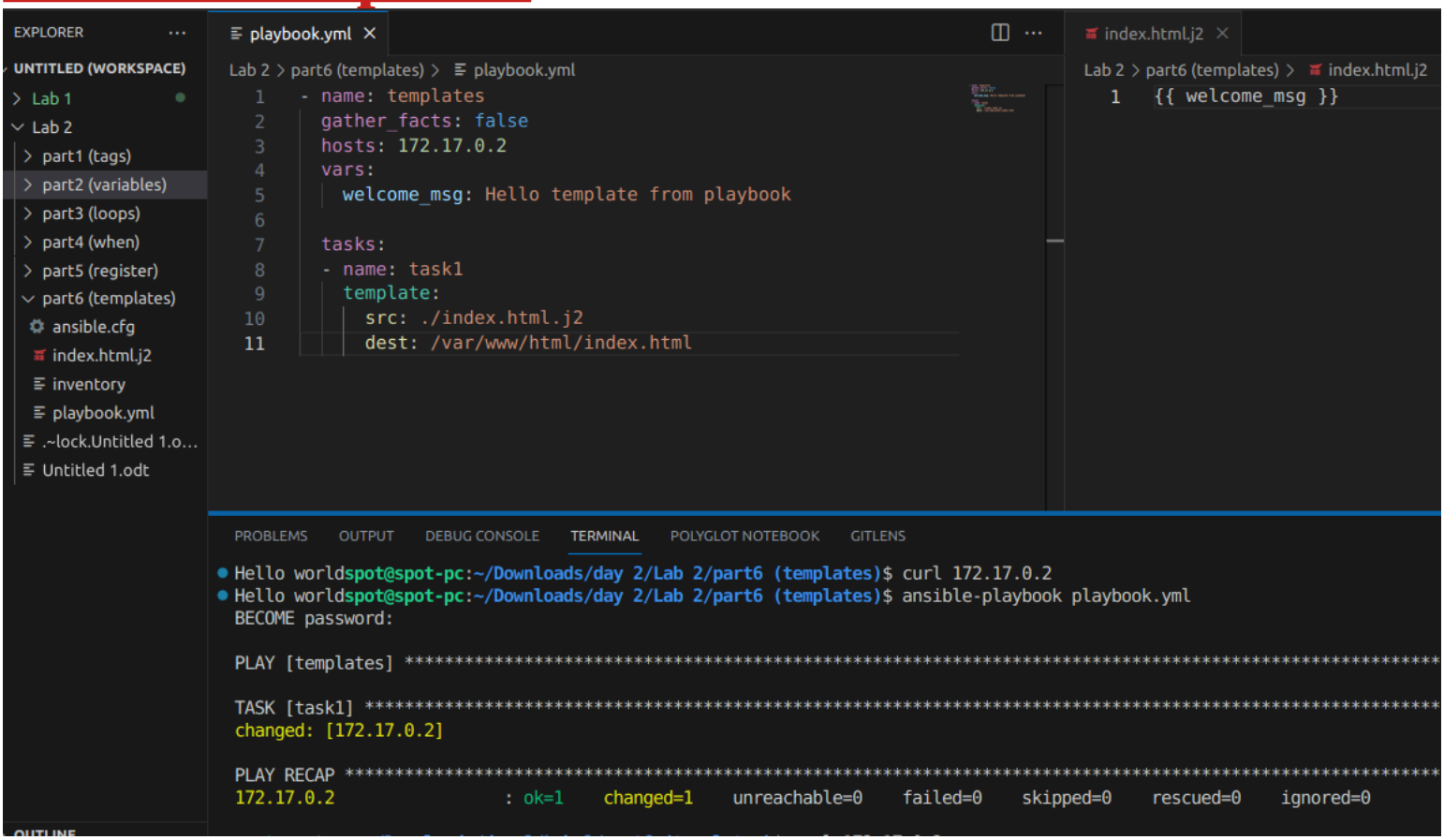


- Restart service if the installation task was changed or was not failed

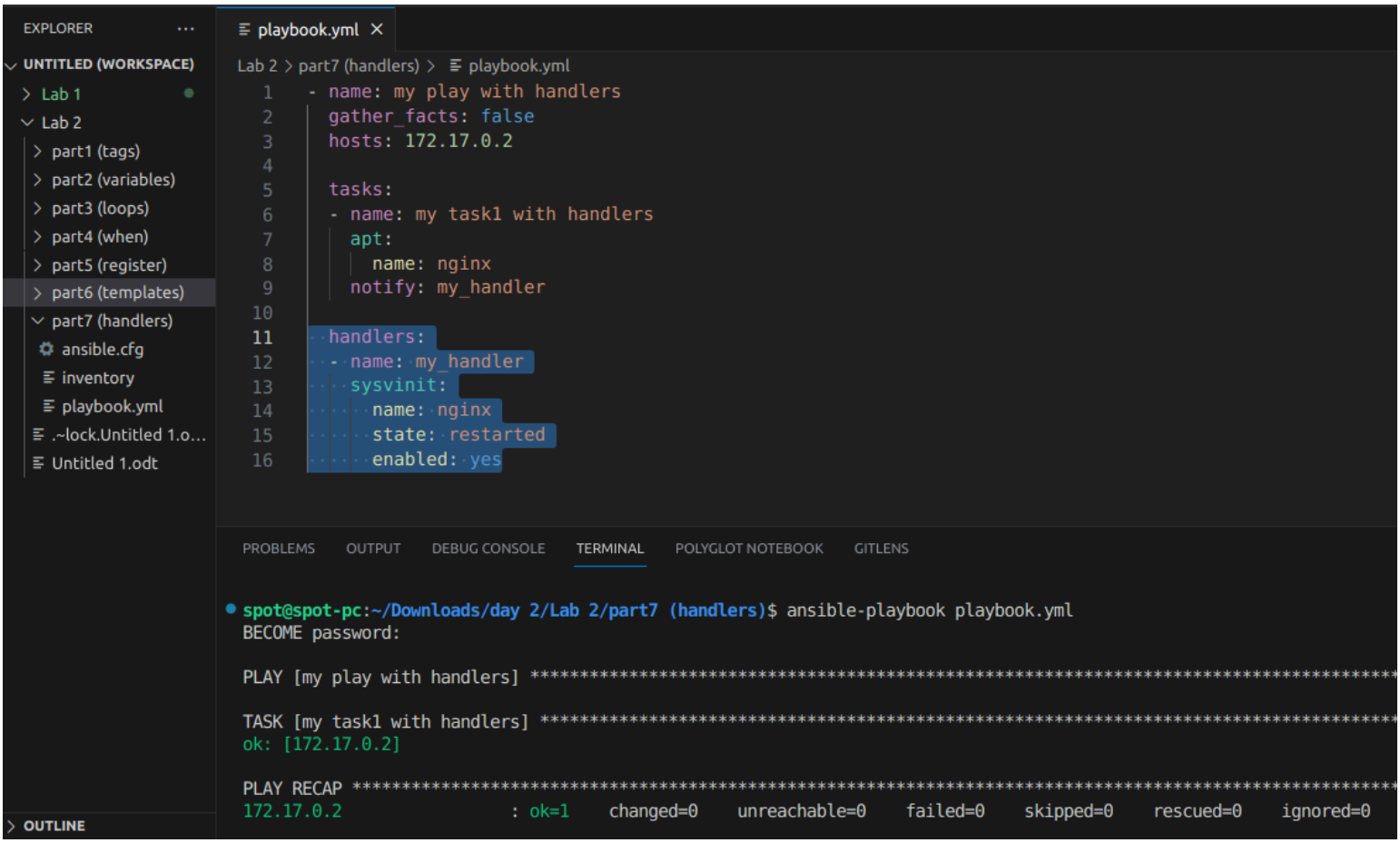




Part 6: Templates

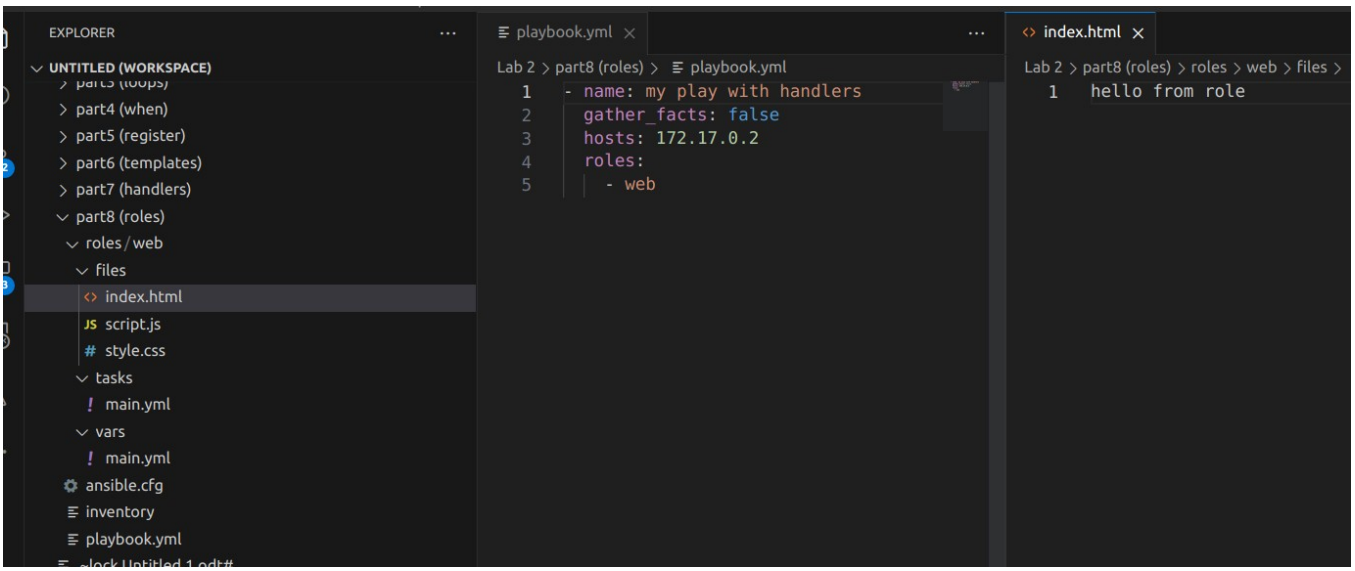


Part 7: Handlers

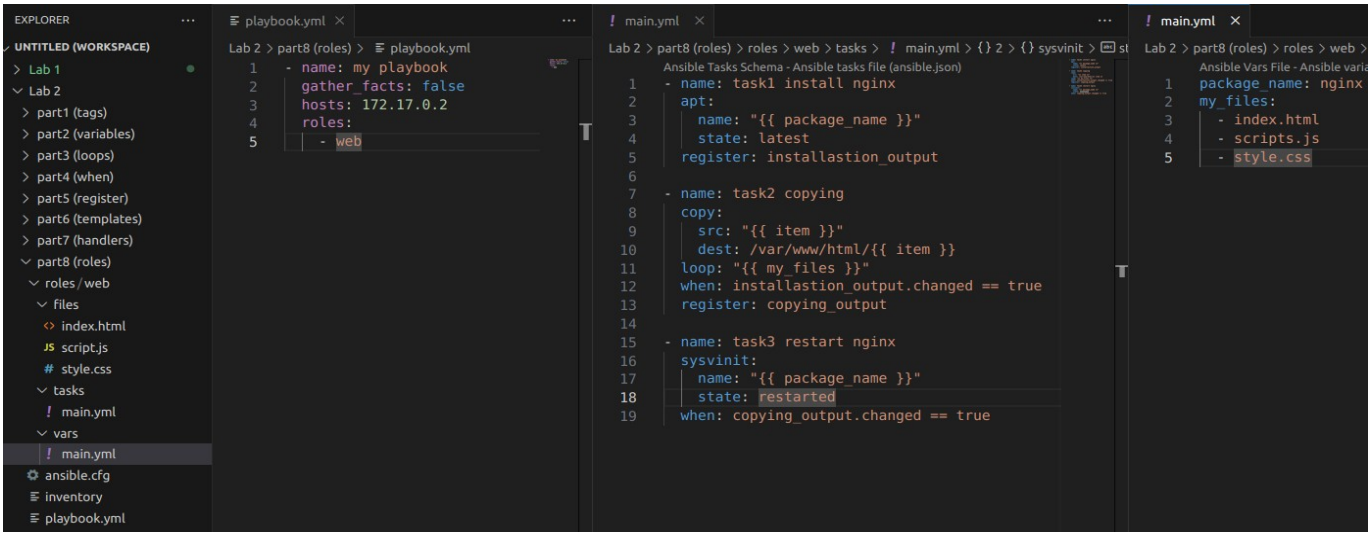


Part 8: Roles

- Create your first role with name (web)



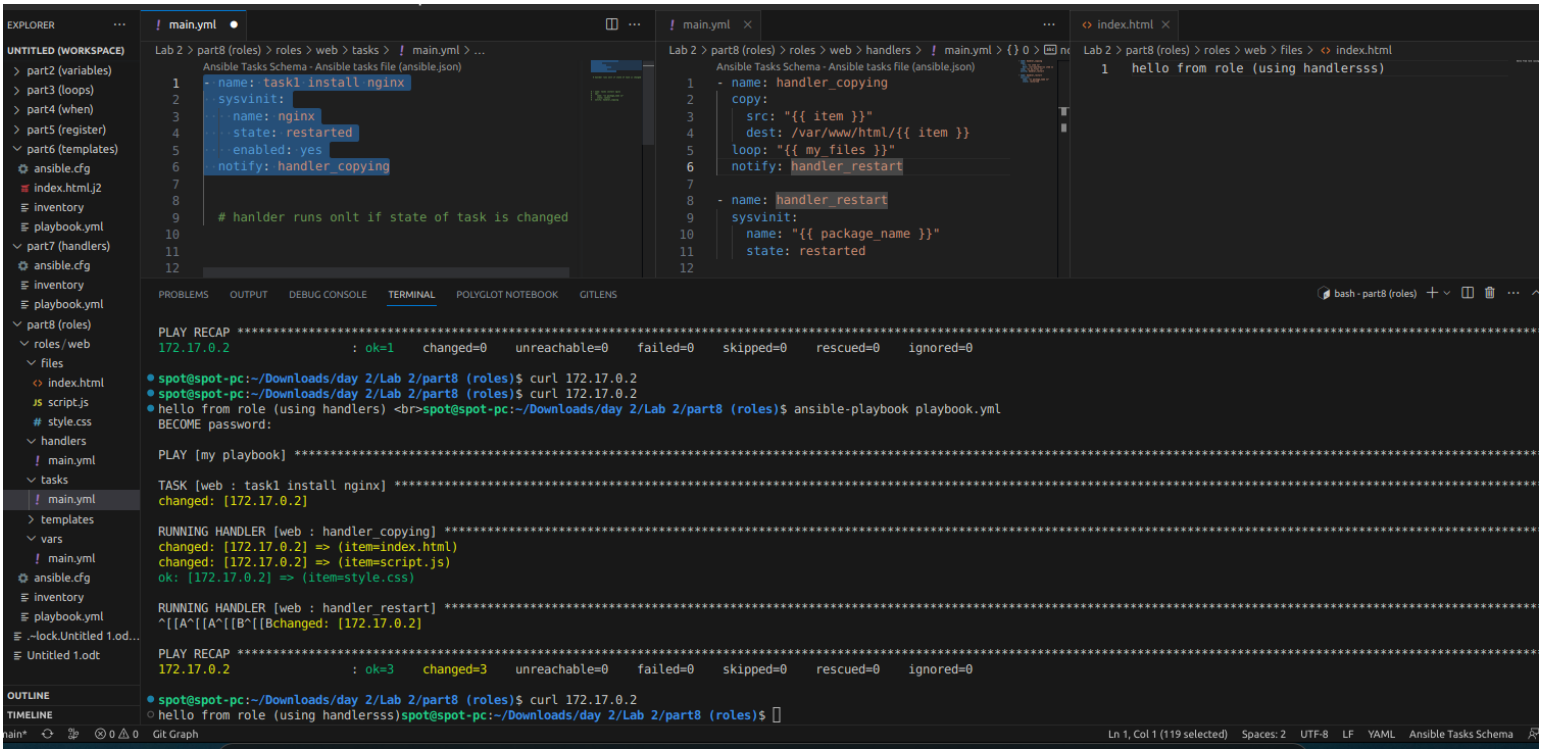
- The task book will include:
  1. installing a package
     (get the package name from vars)
  2. copying a list of files from controller to host using loop
     (get the list of file names from vars)
     (the actual files will be stored in ./roles/web/files)
     (will be executed only when the install task is in state: changed)
  3. Restart the service of the installed package
     (will be executed only when the copy task is in state: changed)




```
Hello template from playbookspot@spot-pc:~/Downloads/day 2/Lab 2/part8 (roles)$ ansible-playbook playbook.yml
BECOME password:

PLAY [my playbook] *************************************************************************************************************************************************

TASK [web : task1 install nginx] ***********************************************************************************************************************************
ok: [172.17.0.2]

TASK [web : task2 copying] *****************************************************************************************************************************************
skipping: [172.17.0.2] => (item=index.html)
skipping: [172.17.0.2] => (item=scripts.js)
skipping: [172.17.0.2] => (item=style.css)
skipping: [172.17.0.2]

TASK [web : task3 restart nginx] ***********************************************************************************************************************************
skipping: [172.17.0.2]

PLAY RECAP *********************************************************************************************************************************************************
172.17.0.2                 : ok=1    changed=0    unreachable=0    failed=0    skipped=2    rescued=0    ignored=0
```

```
spot@spot-pc:~/Downloads/day 2/Lab 2/part8 (roles)$ curl 172.17.0.2
```

- using Handlers



- using templates also