

layAnsiblevariablesmyansiblehosts
↓

[dev]

server1

server2

[prod]

server3, 4, 5, 6, 7

host_vars →

group_vars

mkdir host_vars ✓

server1.yaml

mkdir group_vars ✓

dev.yaml

prod.yaml

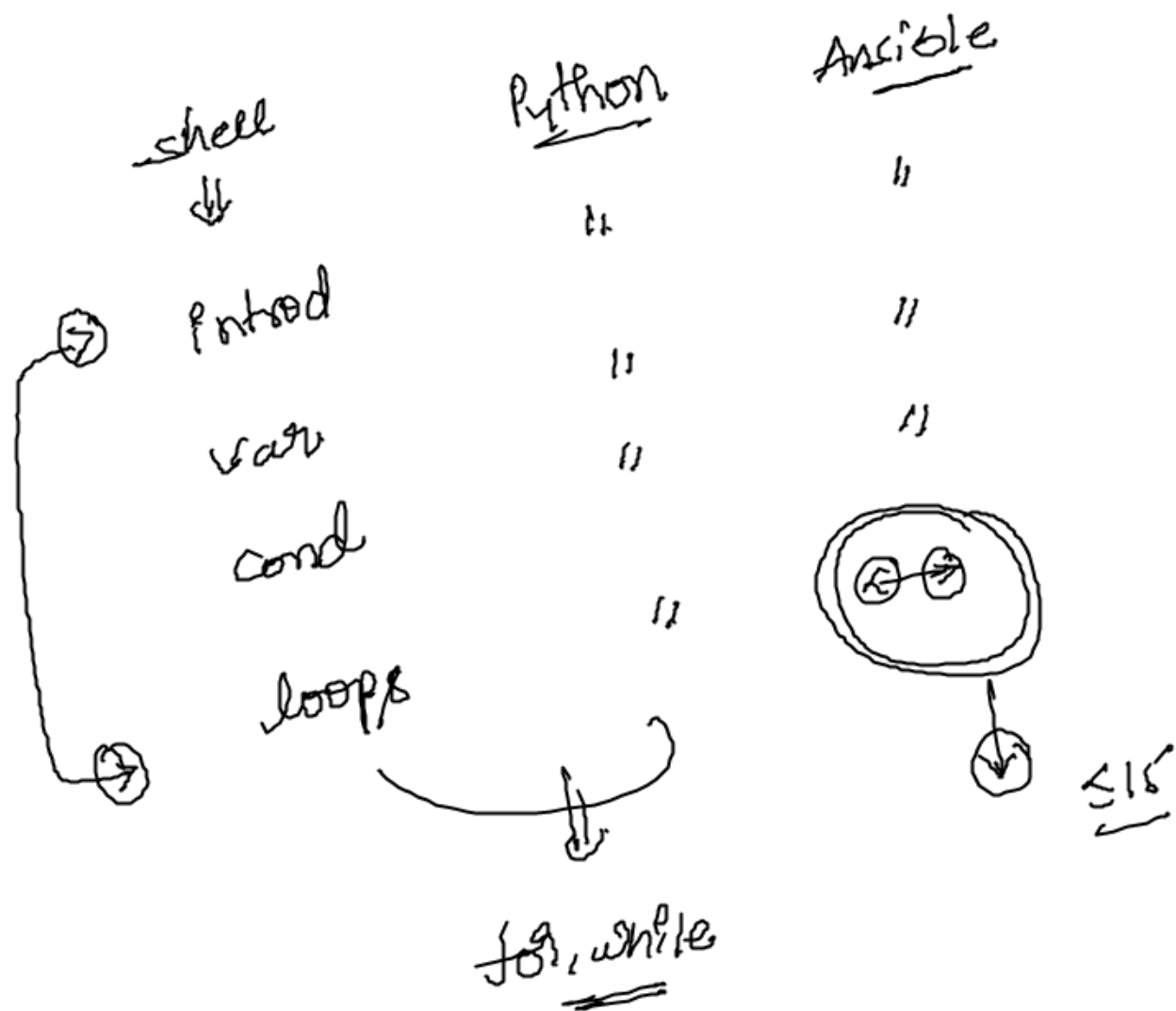
Conditions

⊗ ⇒ if, if-else, nested if
task₁
 when: (some cond₁)




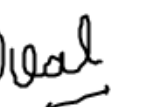
task₁: ⊙
 when: —

relational
 $<, >, \leq, \geq, !=$


"setup" ⇒ Gather server into

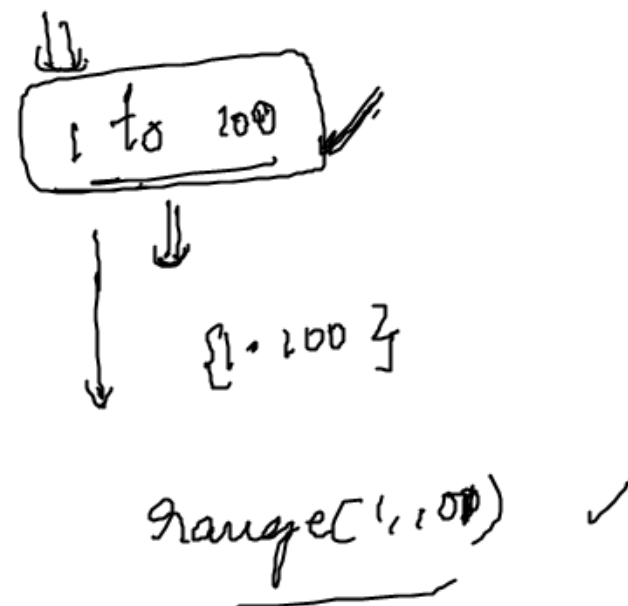
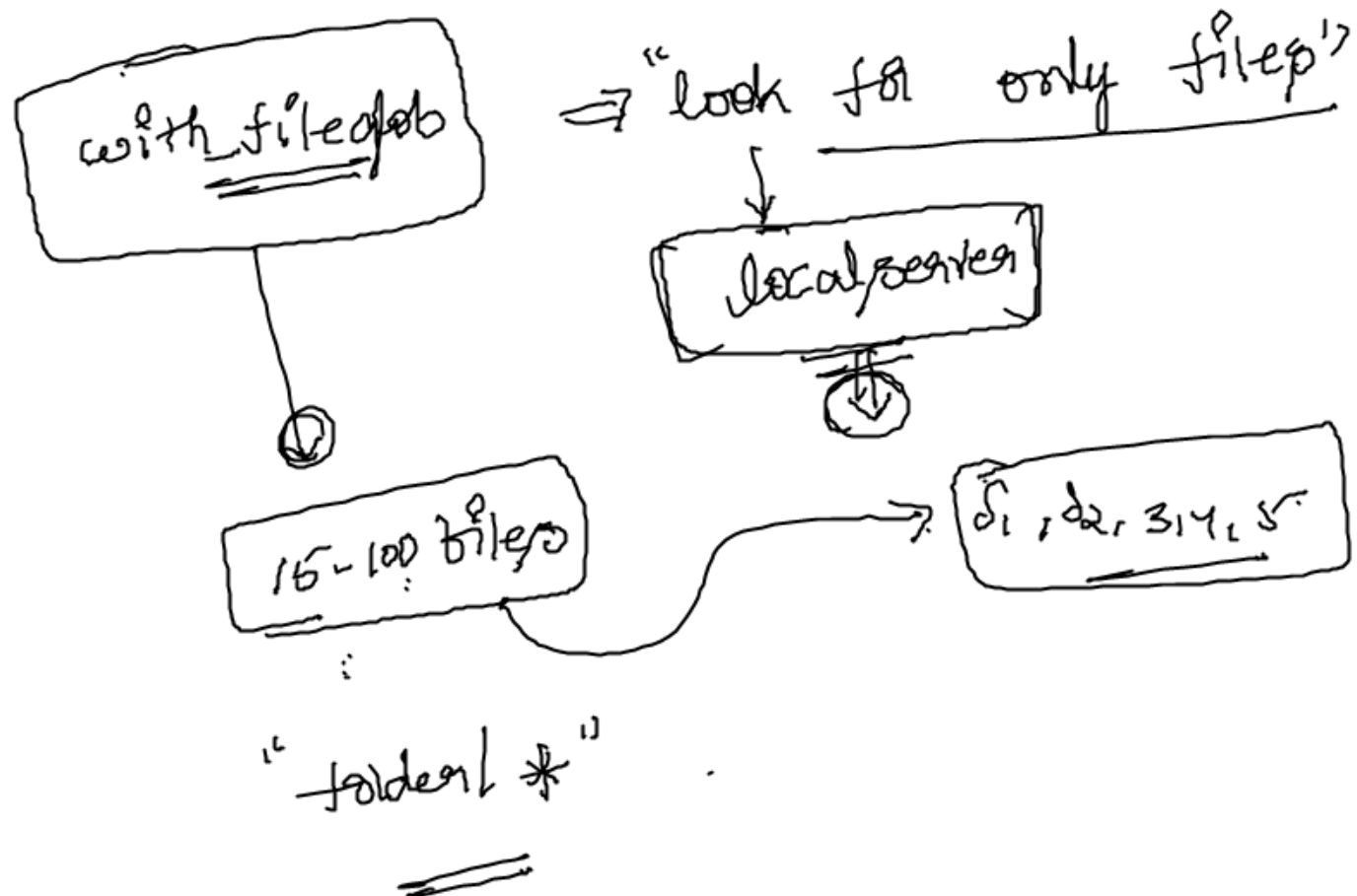


✓ I can decide

for   in range(5):
print   val

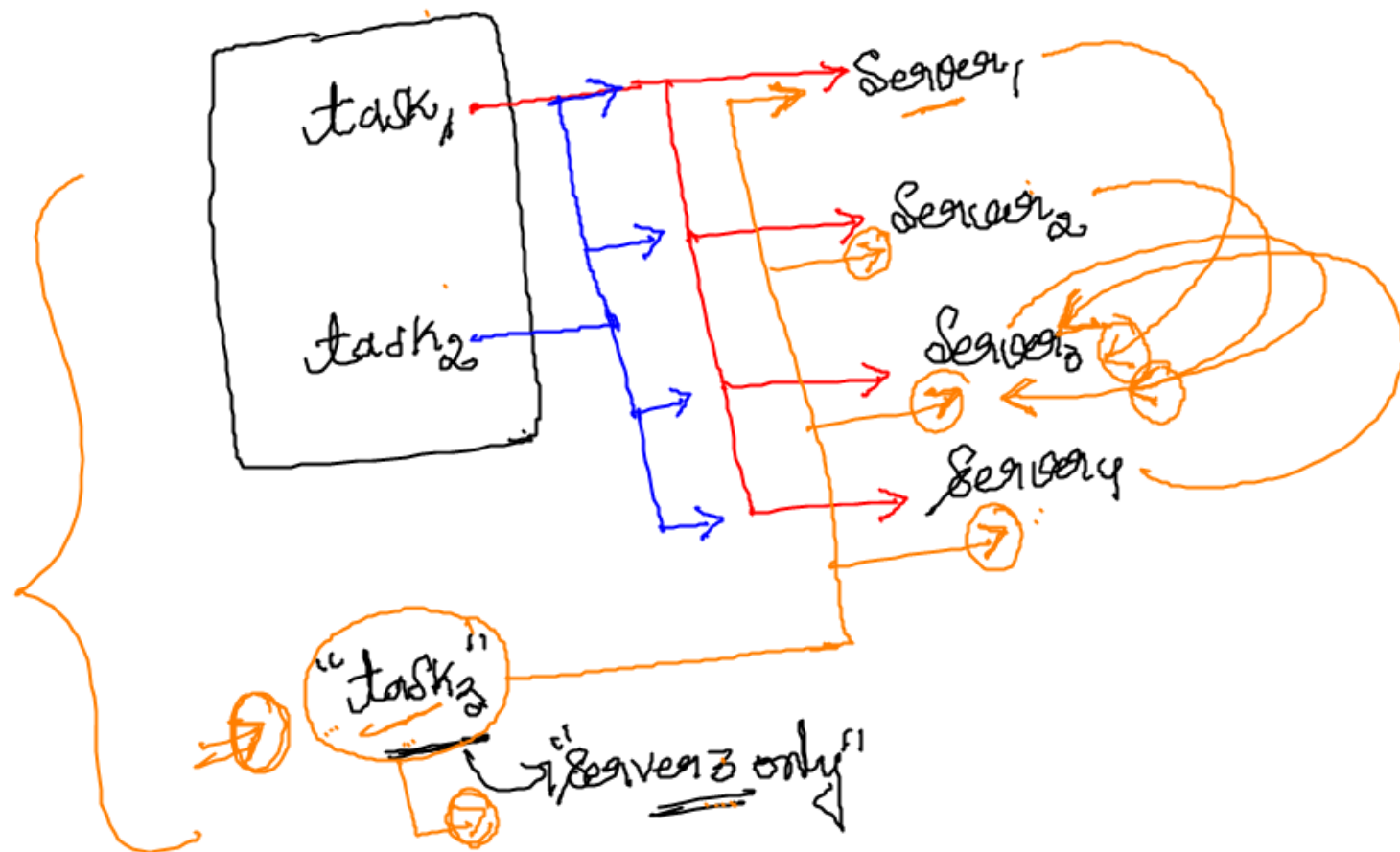
o/p [0, 1, 2, 3, 4]
||
0
1
2
3
4

inaccessible
↓
"{{item}}"
+

pre defined



delegate_to

delegations



```
- name: printing hostipaddress
  command: hostname -i
```

```
- name: printing servername
  command: uname -a
```

```
[ec2-user@controller myansible]$ ansible-playbook specialcases.yaml -v
Using /home/ec2-user/myansible/ansible.cfg as config file
```

```
PLAY [working with special cases] *****
```

```
TASK [Gathering Facts] *****
```

```
ok: [server1]
```

```
ok: [server2]
```

```
TASK [printing hostipaddress] *****
```

```
changed: [server1] => {"changed": true, "cmd": ["hostname", "-i"], "delta": "0:00:00.038685", "end": "2021-05-04 03:13:58.832951", "rc": 0, "start": "2021-05-04 03:13:58.294266", "stderr": "", "stderr_lines": [], "stdout": "172.31.62.207", "stdout_lines": ["172.31.62.207"]}
```

```
changed: [server2] => {"changed": true, "cmd": ["hostname", "-i"], "delta": "0:00:00.038419", "end": "2021-05-04 03:13:58.837157", "rc": 0, "start": "2021-05-04 03:13:58.298738", "stderr": "", "stderr_lines": [], "stdout": "172.31.62.255", "stdout_lines": ["172.31.62.255"]}
```

Ctrl

```
TASK [printing servername] *****
```

```
changed: [server1] => {"changed": true, "cmd": ["uname", "-a"], "delta": "0:00:00.038529", "end": "2021-05-04 03:13:58.840605", "rc": 0, "start": "2021-05-04 03:13:58.802076", "stderr": "", "stderr_lines": [], "stdout": "Linux server1 4.14.231-173.360.amzn2.x86_64 #1 SMP Mon Apr 19 23:20:22 UTC 2021 x86_64 x86_64 x86_64 GNU/Linux", "stdout_lines": ["Linux server1 4.14.231-173.360.amzn2.x86_64 #1 SMP Mon Apr 19 23:20:22 UTC 2021 x86_64 x86_64 x86_64 GNU/Linux"]}
```

```
changed: [server2] => {"changed": true, "cmd": ["uname", "-a"], "delta": "0:00:00.038388", "end": "2021-05-04 03:13:58.837419", "rc": 0, "start": "2021-05-04 03:13:58.799031", "stderr": "", "stderr_lines": [], "stdout": "Linux server2 4.14.231-173.360.amzn2.x86_64 #1 SMP Mon Apr 19 23:20:22 UTC 2021 x86_64 x86_64 x86_64 GNU/Linux", "stdout_lines": ["Linux server2 4.14.231-173.360.amzn2.x86_64 #1 SMP Mon Apr 19 23:20:22 UTC 2021 x86_64 x86_64 x86_64 GNU/Linux"]}
```

```
[ec2-user@controller myansible]$ ansible-playbook specialcases.yaml -v
Using /home/ec2-user/myansible/ansible.cfg as config file
```

```
PLAY [working with special cases] *****
```

```
TASK [Gathering Facts] *****
```

```
ok: [server2]
```

```
ok: [server1]
```

```
TASK [printing hostipaddress] *****
```

```
changed: [server1] => {"changed": true, "cmd": ["hostname", "-i"], "delta": "0:00:00.038941", "end": "2021-05-04 03:16:12.926354", "rc": 0, "start": "2021-05-04 03:16:12.887413", "stderr": "", "stderr_lines": [], "stdout": "172.31.62.207", "stdout_lines": ["172.31.62.207"]}
```

```
changed: [server2] => {"changed": true, "cmd": ["hostname", "-i"], "delta": "0:00:00.037992", "end": "2021-05-04 03:16:12.925322", "rc": 0, "start": "2021-05-04 03:16:12.887330", "stderr": "", "stderr_lines": [], "stdout": "172.31.62.255", "stdout_lines": ["172.31.62.255"]}
```

```
TASK [printing servername] *****
```

```
changed: [server2 -> server1] => {"changed": true, "cmd": ["uname", "-a"], "delta": "0:00:00.076198", "end": "2021-05-04 03:16:13.566714", "rc": 0, "start": "2021-05-04 03:16:13.490516", "stderr": "", "stderr_lines": [], "stdout": "Linux server1 4.14.231-173.360.amzn2.x86_64 #1 SMP Mon Apr 19 23:20:22 UTC 2021 x86_64 x86_64 x86_64 GNU/Linux", "stdout_lines": ["Linux server1 4.14.231-173.360.amzn2.x86_64 #1 SMP Mon Apr 19 23:20:22 UTC 2021 x86_64 x86_64 x86_64 GNU/Linux"]}
```

```
changed: [server1 -> server1] => {"changed": true, "cmd": ["uname", "-a"], "delta": "0:00:00.049953", "end": "2021-05-04 03:16:13.620618", "rc": 0, "start": "2021-05-04 03:16:13.570665", "stderr": "", "stderr_lines": [], "stdout": "Linux server1 4.14.231-173.360.amzn2.x86_64 #1 SMP Mon Apr 19 23:20:22 UTC 2021 x86_64 x86_64 x86_64 GNU/Linux", "stdout_lines": ["Linux server1 4.14.231-173.360.amzn2.x86_64 #1 SMP Mon Apr 19 23:20:22 UTC 2021 x86_64 x86_64 x86_64 GNU/Linux"]}
```

```
PLAY RECAP *****
```

```
server1          : ok=3    changed=2    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
```

```
server2          : ok=3    changed=2    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
```

```
[ec2-user@controller myansible]$
```


ansible running parallelly

serial ↓ shell/python

① → task₁ → server₁

② → task₂ → server₁

③ → task₁ → server₂

task₂ → server₂

④ → joining

Ansible

⊗ parallel

① task₁ → server₁
→ server₂

② task₂ → server₁
→ server₂

joining

10 servers

3

3

3

1

~~3~~
Serial: 3

Serial: 1

~~3~~

~~Server 1~~ ✓

2 ✓

3 ✓

4 ✓

5 ✓

⋮

100 servers (1)

Serial: 10

1000 servers

1st 10

2nd 10

3rd 10

4
y
b

10th (10)

hosts

any ansible hosts

copy

