```
thematrix@thematrix-lt:~/TheMatrix2/lab10$ vagrant up
```

- При запуске машин необходимо передать значение моста, к которому подключается интерфейс машин (=1). Это особенность коробки hashicorp/bionic64

```
2) docker0
==> vm2: When choosing an interface, it is usually the one that is
==> vm2: being used to connect to the internet.
    vm2: Which interface should the network bridge to? 1
```

```
thematrix@thematrix-lt:~/TheMatrix2/lab10$ vagrant up
```

```
thematrix@thematrix-lt:~/TheMatrix2/lab10$ vagrant ssh vm1
Welcome to Ubuntu 18.04.3 LTS (GNU/Linux 4.15.0-58-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:     https://landscape.canonical.com
 * Support:        https://ubuntu.com/advantage

  System information as of Wed Jun  7 11:07:01 UTC 2023

  System load:  0.02              Processes:           92
  Usage of /:   2.5% of 61.80GB   Users logged in:     0
  Memory usage: 11%               IP address for eth0: 10.0.2.15
  Swap usage:   0%                IP address for eth1: 192.168.33.10

 * Strictly confined Kubernetes makes edge and IoT secure. Learn how MicroK8s
   just raised the bar for easy, resilient and secure K8s cluster deployment.

   https://ubuntu.com/engage/secure-kubernetes-at-the-edge

0 packages can be updated.
0 updates are security updates.
```

```
vagrant@vm1:~$ sudo apt update
```

```
vagrant@vm1:~$ sudo apt install ansible -y
```

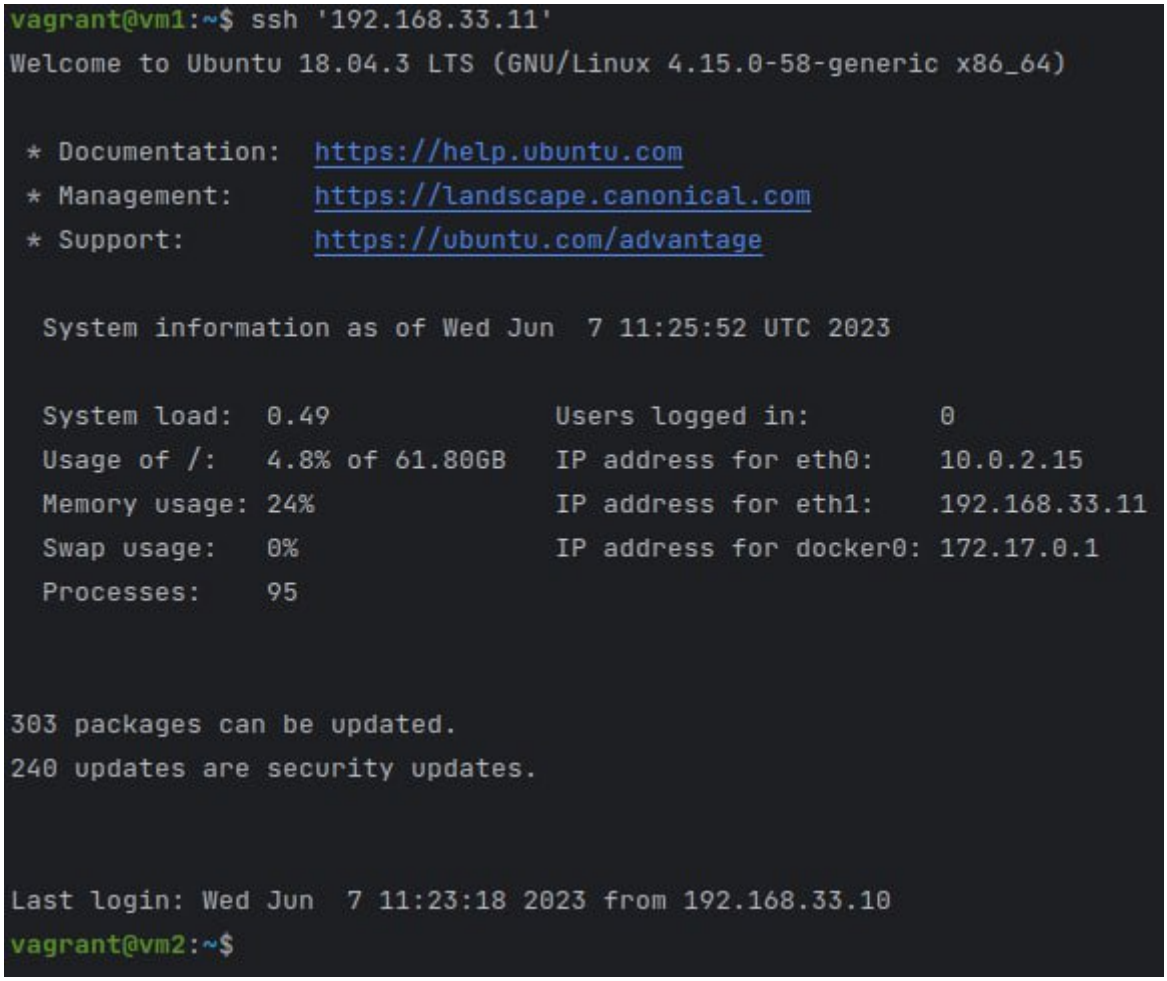
```
vagrant@vm1:~$ ssh-keygen
Generating public/private rsa key pair.
Enter file in which to save the key (/home/vagrant/.ssh/id_rsa):
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /home/vagrant/.ssh/id_rsa.
Your public key has been saved in /home/vagrant/.ssh/id_rsa.pub.
The key fingerprint is:
SHA256:xEixXkDJHlKDBqe9AzEX8zKfcr1CaOjtRGUynLhx6zI vagrant@vm1
The key's randomart image is:
+---[RSA 2048]----+
|  +.=*Bo         |
|   X+=+*         |
|  =.Xo*.+        |
|   * &.=         |
|  o O * S        |
| . = =   .       |
|  E + . .        |
|   =   .         |
|    .            |
+----[SHA256]-----+
```

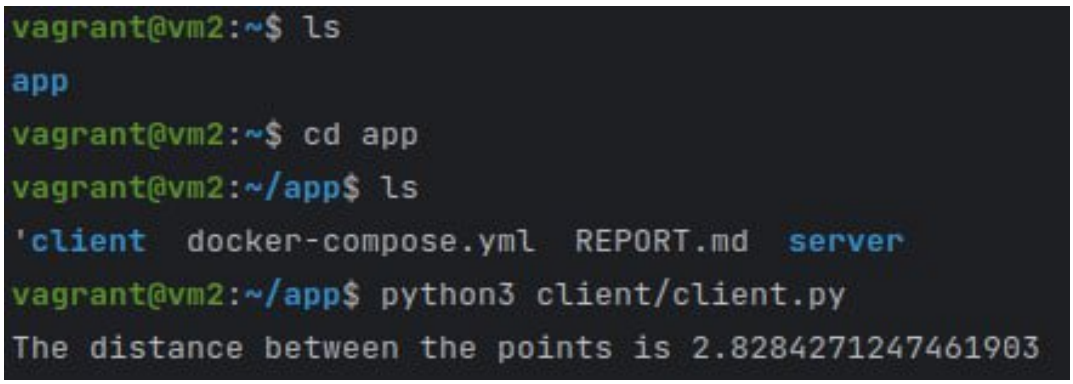
```
vagrant@vm1:~$ ssh-copy-id -i 192.168.33.11
/usr/bin/ssh-copy-id: INFO: Source of key(s) to be installed: "/home/vagrant/.ssh/id_rsa.pub"
The authenticity of host '192.168.33.11 (192.168.33.11)' can't be established.
ECDSA key fingerprint is SHA256:uY6GIjFdI9qTC4QYb980QRk+WblJF9cd5glr3SmmL+w.
Are you sure you want to continue connecting (yes/no)? yes
/usr/bin/ssh-copy-id: INFO: attempting to log in with the new key(s), to filter out any that are already installed
/usr/bin/ssh-copy-id: INFO: 1 key(s) remain to be installed -- if you are prompted now it is to install the new keys
vagrant@192.168.33.11's password:

Number of key(s) added: 1

Now try logging into the machine, with:   "ssh '192.168.33.11'"
and check to make sure that only the key(s) you wanted were added.
```

```
vagrant@vm1:~$ mkdir ansible
vagrant@vm1:~$ nano ansible/ansible.cfg
vagrant@vm1:~$ nano ansible/inventory.ini
vagrant@vm1:~$ nano ansible/playbook.yml
```

```
vagrant@vm1:~/ansible$ ansible --version
ansible 2.5.1
  config file = /home/vagrant/ansible/ansible.cfg
  configured module search path = [u'/home/vagrant/.ansible/plugins/modules', u'/usr/share/ansible/plugins/modules']
  ansible python module location = /usr/lib/python2.7/dist-packages/ansible
  executable location = /usr/bin/ansible
  python version = 2.7.15+ (default, Nov 27 2018, 23:36:35) [GCC 7.3.0]
```

```
vagrant@vm1:~/ansible$ ansible-playbook playbook.yml
 [WARNING]: Found both group and host with same name: vm2

 [WARNING]: Found both group and host with same name: vm1


PLAY [Install Docker and Docker Compose] ***************************************

TASK [Install Docker] **********************************************************
ok: [vm2]

TASK [Install Docker Compose] **************************************************
changed: [vm2]

PLAY [Deploy Application] ******************************************************

TASK [Clone repository] ********************************************************
changed: [vm2]

TASK [Start Docker Compose] ****************************************************
changed: [vm2]

PLAY RECAP *********************************************************************
vm2                        : ok=4    changed=3    unreachable=0    failed=0
```





клиент отправляет сереверу значения координта двух точек, тот в свою очередь возвращает расстояние между ними