1- ساخت ردیس

docker build -t redistest .

docker tag redistest myredis   2-

docker run -d -p 6379:6379 myredis redis   3-

```
PS E:\CC\project2\part2\redisfolder> docker ps
CONTAINER ID   IMAGE      COMMAND    CREATED    STATUS     PORTS      NAMES
PS E:\CC\project2\part2\redisfolder> docker run -d -p 6379:6379 myredis redis
34fab62c3c31788a2b589eaa596eadd9ced48742089ced001e249562acc9cada
PS E:\CC\project2\part2\redisfolder>
```

34fab62c3c31788a2b589eaa596eadd9ced48742089ced001e249562acc9cada

4- از چه پورتی استفاده کرده :

docker inspect myredis

```
PS E:\CC\project2\part2\redisfolder> docker inspect myredis
[
    {
        "Id": "sha256:2501627cf044dcd1c463797f9d413b13b51d0205f0865d8fae7c48059e70c911",
        "RepoTags": [
            "myredis:latest",
            "redistest:latest"
        ],
        "RepoDigests": [],
        "Parent": "",
        "Comment": "buildkit.dockerfile.v0",
        "Created": "2022-12-20T21:20:51.1661699Z",
        "Container": "",
        "ContainerConfig": {
            "Hostname": "",
            "Domainname": "",
            "User": "",
            "AttachStdin": false,
            "AttachStdout": false,
            "AttachStderr": false,
            "Tty": false,
            "OpenStdin": false,
            "StdinOnce": false,
            "Env": null,
            "Cmd": null,
            "Image": "",
            "Volumes": null,
            "WorkingDir": "",
            "Entrypoint": null,
            "OnBuild": null,
            "Labels": null
        },
```

```
PS E:\CC\project2\part2> docker image push rey2rey/myredis
Using default tag: latest
The push refers to repository [docker.io/rey2rey/myredis]
d4644049d97b: Pushed
83109fa660b2: Pushed
30d3c4334a23: Pushed
f2fa9f4cf8fd: Pushed
latest: digest: sha256:a8865be54c999d16607956122d26bc2c9188899660cd1853fa1d13d13d722d3e size: 1157
PS E:\CC\project2\part2>
```

```
PS E:\CC\project2\part2> docker network create --driver bridge mynet
5f4869b48bfabd48f53f6d9006397eb0837a3b01bc223b19a71bb280dcdcdb69
PS E:\CC\project2\part2> docker volume create my-volume
my-volume
PS E:\CC\project2\part2>
```

```
PS E:\CC\project2\part2> docker run -d -p 6379:6379 --name myredis -v my-volume:/data --network mynet redis
f87966b6a50c7f6e232985861163f0cd8e2a7c30b3db5c5243c3f1bb2c977594
PS E:\CC\project2\part2>
```

```
1d62ee49c7ce    kicbase/stable:v0.0.36    /usr/local/bin/entr…     5 days ago     Exited (130) 5 days ago            minikube
PS E:\CC\project2\part2> docker network create --driver bridge mynet
5f4869b48bfabd48f53f6d9006397eb0837a3b01bc223b19a71bb280dcdcdb69
PS E:\CC\project2\part2> docker volume create my-volume
my-volume
PS E:\CC\project2\part2> docker pull rey2rey/myredis
Using default tag: latest
PS E:\CC\project2\part2> docker ps
CONTAINER ID    IMAGE      COMMAND    CREATED    STATUS    PORTS       NAMES
PS E:\CC\project2\part2> docker run -d -p 6379:6379 --name rey2rey2/myredis -v my-volume:/data --network mynet redis
docker: Error response from daemon: Invalid container name (rey2rey2/myredis), only [a-zA-Z0-9][a-zA-Z0-9_.-] are allowed.
See 'docker run --help'.
PS E:\CC\project2\part2> docker run -d -p 6379:6379 --name myredis -v my-volume:/data --network mynet redis
f87966b6a50c7f6e232985861163f0cd8e2a7c30b3db5c5243c3f1bb2c977594
PS E:\CC\project2\part2> docker ps -a
CONTAINER ID    IMAGE                  COMMAND                 CREATED          STATUS                  PORTS                     NAMES
f87966b6a50c    redis                  "docker-entrypoint.s…"  42 seconds ago   Up 40 seconds           0.0.0.0:6379->6379/tcp    myredis
34fab62c3c31    myredis                "/usr/bin/redis-serv…"  20 hours ago     Exited (1) 20 hours ago                           crazy_rosalind
4d0aee30fcfc    rey2rey/myimagehub     "/bin/bash"             2 days ago       Exited (0) 2 days ago                             recursing_curran
40dc1b014ef1    rey2rey/myimagehub     "/bin/bash"             2 days ago       Exited (0) 2 days ago                             nifty_visvesvaraya
322d0502bc79    rey2rey/myimagehub     "/bin/bash"             2 days ago       Exited (0) 2 days ago                             youthful_spence
f820dfd234de    rey2rey/myimagehub     "/bin/bash"             2 days ago       Exited (127) 2 days ago                           angry_haibt
8b11725f9063    rey2rey/myimagehub     "-fsSL https://www.g…"  2 days ago       Created                                           exciting_blackwell
03d0d0c75d54    rey2rey/myimagehub     "/bin/bash"             2 days ago       Exited (130) 2 days ago                           vigorous_agnesi
591282e81aa8    imagetest              "/bin/bash"             2 days ago       Exited (130) 2 days ago                           wizardly_brattain
1d62ee49c7ce    kicbase/stable:v0.0.36 "/usr/local/bin/entr…"  5 days ago       Exited (130) 5 days ago                           minikube
PS E:\CC\project2\part2>
```

docker build -t appserver .   -1

```
PS E:\CC\project2\part2> docker build -t appserver .
[+] Building 15.0s (9/9) FINISHED
 => [internal] load build definition from Dockerfile                                                    0.0s
 => => transferring dockerfile: 32B                                                                     0.0s
 => [internal] load .dockerignore                                                                       0.0s
 => => transferring context: 2B                                                                         0.0s
 => [internal] load metadata for docker.io/library/python:3.11.0a6-alpine3.15                           1.0s
 => CACHED [1/5] FROM docker.io/library/python:3.11.0a6-alpine3.15@sha256:6c215dcdebd4c2d15e5e5fb8307f913c34af918b1b5e5f166d620c871281d2cc   0.0s
 => [internal] load build context                                                                       0.0s
 => => transferring context: 274B                                                                       0.0s
 => [2/5] COPY requirements.txt .                                                                        0.0s
 => [3/5] RUN pip install -r requirements.txt                                                           13.5s
 => [4/5] COPY . .                                                                                       0.0s
 => exporting to image                                                                                   0.3s
 => => exporting layers                                                                                  0.3s
 => => writing image sha256:a1c6451cfc1b0a9850d7d1b0d0822026e88f5e2a33303369f9fefa812dc62ca3             0.0s
 => => naming to docker.io/library/appserver                                                            0.0s

Use 'docker scan' to run Snyk tests against images to find vulnerabilities and learn how to fix them
PS E:\CC\project2\part2>
```

```
PS E:\CC\project2\part2> docker images
REPOSITORY                      TAG            IMAGE ID       CREATED            SIZE
appserver                       latest         a1c6451cfc1b   About a minute ago 72MB
myredis                         latest         2501627cf044   21 hours ago       214MB
redistest                       latest         2501627cf044   21 hours ago       214MB
rey2rey/myredis                 latest         2501627cf044   21 hours ago       214MB
imagetest                       latest         012a0a1c165b   2 days ago         125MB
rey2rey/myimagehub              latest         012a0a1c165b   2 days ago         125MB
python                          latest         00cd1fb8bdcc   8 weeks ago        932MB
kicbase/stable                  v0.0.36        866c1fe4e3f2   8 weeks ago        1.11GB
gcr.io/k8s-minikube/kicbase     v0.0.36        866c1fe4e3f2   8 weeks ago        1.11GB
alpine/curl                     latest         6c746001fe6d   12 months ago      7.71MB
redis                           latest         02c7f2054405   15 months ago      105MB
python                          3.9.6-alpine   0238e48b207f   16 months ago      45.1MB
PS E:\CC\project2\part2>
```

docker run --rm -p 5000:5000 --network mynet --name getPrice appserver   -2

```
PS E:\CC\project2\part2> docker run --rm -p 5000:5000 --network mynet --name getPrice appserver
300
5000
bitcoin
 * Serving Flask app 'app'
 * Debug mode: on
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
 * Running on all addresses (0.0.0.0)
 * Running on http://127.0.0.1:5000
 * Running on http://172.18.0.3:5000
Press CTRL+C to quit
 * Restarting with stat
 * Debugger is active!
 * Debugger PIN: 291-293-427
172.18.0.1 - - [21/Dec/2022 20:04:30] "GET /test HTTP/1.1" 200 -
172.18.0.1 - - [21/Dec/2022 20:04:35] "GET /test HTTP/1.1" 200 -
172.18.0.1 - - [21/Dec/2022 20:06:13] "GET /test HTTP/1.1" 200 -
172.18.0.1 - - [21/Dec/2022 20:09:26] "GET /test HTTP/1.1" 200 -
```

GET ⌄ http://127.0.0.1:5000/test

Params   Authorization   Headers (6)   Body   Pre-request Script   Tests   Se

Query Params

	KEY	VALUE
	Key	Value

Body   Cookies   Headers (5)   Test Results

Pretty   Raw   Preview   Visualize   JSON ⌄

```
1   {
2       "ArzName": "bitcoin",
3       "price": 16762.24
4   }
```

Press CTRL+C to quit
 * Restarting with stat
 * Debugger is active!
 * Debugger PIN: 291-293-427
172.18.0.1 - - [21/Dec/2022 20:04:30] "GET /test HTTP/1.1" 200 -
172.18.0.1 - - [21/Dec/2022 20:04:35] "GET /test HTTP/1.1" 200 -
172.18.0.1 - - [21/Dec/2022 20:06:13] "GET /test HTTP/1.1" 200 -
172.18.0.1 - - [21/Dec/2022 20:09:26] "GET /test HTTP/1.1" 200 -

GET   ⌄   http://127.0.0.1:5000/test

Params   Authorization   Headers (6)   Body   Pre-request Script   Tests   S

Query Params

KEY	VALUE
Key	Value

Body   Cookies   Headers (5)   Test Results

Pretty   Raw   Preview   Visualize   JSON ⌄   ⇄

```
1  {
2      "ArzName": "bitcoin",
3      "price": 16754.77
4  }
```

```
PS E:\CC\project2\part2> docker stop getPrice
getPrice
PS E:\CC\project2\part2>
```

```
denied: requested access to the resource is denied
PS E:\CC\project2\part2> docker tag appserver rey2rey/appserver
```

```
PS E:\CC\project2\part2> docker image push rey2rey/appserver
Using default tag: latest
The push refers to repository [docker.io/rey2rey/appserver]
00575d3c791c: Layer already exists
dbbec3b12cd5: Layer already exists
0825b1d10c3f: Layer already exists
cf47a6e12eb3: Layer already exists
e643e0ae620e: Layer already exists
2091c8163eb1: Pushed
fbd7d5451c69: Layer already exists
4fc242d58285: Pushed
latest: digest: sha256:cab6de2e9ca119c1e02f63eb9ade95ddab6b6fcee70345537bad124c36643ae9 size: 1994
PS E:\CC\project2\part2>
```

```
PS E:\CC\project2\part2> docker ps
CONTAINER ID   IMAGE    COMMAND                 CREATED        STATUS        PORTS                     NAMES
f87966b6a50c   redis    "docker-entrypoint.s…"  2 hours ago    Up 2 hours    0.0.0.0:6379->6379/tcp    myredis
PS E:\CC\project2\part2>
```

```
PS E:\CC\project2\part2> docker inspect appserver
[
    {
        "Id": "sha256:fed0df6ba96986a0cdfe3297a583cd2f2fb7127e1316e4d837d179dafbd924cf",
        "RepoTags": [
            "appserver:latest"
        ],
        "RepoDigests": [],
        "Parent": "",
        "Comment": "buildkit.dockerfile.v0",
        "Created": "2022-12-21T20:04:17.5787319Z",
        "Container": "",
        "ContainerConfig": {
            "Hostname": "",
            "Domainname": "",
            "User": "",
            "AttachStdin": false,
            "AttachStdout": false,
            "AttachStderr": false,
            "Tty": false,
            "OpenStdin": false,
            "StdinOnce": false,
```

```
PS E:\CC\project2\part2> docker stats
```

```
CONTAINER ID   NAME      CPU %   MEM USAGE / LIMIT    MEM %   NET I/O           BLOCK I/O   PIDS
f87966b6a50c   myredis   0.43%   8.598MiB / 8.876GiB  0.09%   15.3kB / 9.15kB   0B / 0B     5
```