OUTPUT SCREENSHOTS

PES2UGSSCS132
BHUMIKA MASKI

WEEK1
SS

```
NAME                                      READY   STATUS      RESTARTS        AGE
ab-stress-test-rzwqm                      0/1     Completed   0               6h25m
nginx-deployment-pes2ug22cs132-9d4cfb889-g76lm  1/1  Running  6 (3h17m ago)   35d
nginx-deployment-pes2ug22cs132-9d4cfb889-wjkbh  1/1  Running  6 (3h17m ago)   35d
redis-5f86f8f9c7-vj8mm                    1/1     Running     1 (3h17m ago)   6h37m
url-shortener-5f4597c48-cv9fv             1/1     Running     1 (3h17m ago)   6h35m
url-shortener-5f4597c48-l8knj             1/1     Running     1 (3h17m ago)   6h35m
url-shortener-5f4597c48-rsn5b             1/1     Running     1 (3h17m ago)   6h35m

C:\Users\hp\PES2UG22CS188_PES2UG22CS132_PES2UG22CS127_PES2UG22CS164_Load-Balanced_URL_Shortener>kubectl get svc
NAME                 TYPE          CLUSTER-IP      EXTERNAL-IP    PORT(S)          AGE
kubernetes           ClusterIP     10.96.0.1       <none>         443/TCP          39d
redis                ClusterIP     10.109.147.56   <none>         6379/TCP         6h37m
redis-service        ClusterIP     10.110.44.140   <none>         6379/TCP         6h35m
url-shortener-service  LoadBalancer  10.103.210.254  127.0.0.1    5000:30814/TCP   6h35m

C:\Users\hp\PES2UG22CS188_PES2UG22CS132_PES2UG22CS127_PES2UG22CS164_Load-Balanced_URL_Shortener> kubectl autoscale deployment url-shortener --cpu-percent=50 --min=3 --m
ax=6
Error from server (AlreadyExists): horizontalpodautoscalers.autoscaling "url-shortener" already exists

C:\Users\hp\PES2UG22CS188_PES2UG22CS132_PES2UG22CS127_PES2UG22CS164_Load-Balanced_URL_Shortener>kubectl get podskubectl logs redis-5f86f8f9c7-vj8mm
error: the server doesn't have a resource type "podskubectl"

C:\Users\hp\PES2UG22CS188_PES2UG22CS132_PES2UG22CS127_PES2UG22CS164_Load-Balanced_URL_Shortener>kubectl get pods
NAME                                      READY   STATUS      RESTARTS        AGE
ab-stress-test-rzwqm                      0/1     Completed   0               6h28m
nginx-deployment-pes2ug22cs132-9d4cfb889-g76lm  1/1  Running  6 (3h20m ago)   35d
nginx-deployment-pes2ug22cs132-9d4cfb889-wjkbh  1/1  Running  6 (3h20m ago)   35d
redis-5f86f8f9c7-vj8mm                    1/1     Running     1 (3h20m ago)   6h39m
url-shortener-5f4597c48-cv9fv             1/1     Running     1 (3h20m ago)   6h37m
url-shortener-5f4597c48-l8knj             1/1     Running     1 (3h20m ago)   6h37m
url-shortener-5f4597c48-rsn5b             1/1     Running     1 (3h20m ago)   6h37m

C:\Users\hp\PES2UG22CS188_PES2UG22CS132_PES2UG22CS127_PES2UG22CS164_Load-Balanced_URL_Shortener>kubectl logs redis-5f86f8f9c7-vj8mm
1:C 22 Apr 2025 09:48:59.261 * oO0oO0OoO0Oo Redis is starting oO0oO0OoO0Oo
1:C 22 Apr 2025 09:48:59.261 * Redis version=7.4.2, bits=64, commit=00000000, modified=0, pid=1, just started
1:C 22 Apr 2025 09:48:59.261 # Warning: no config file specified, using the default config. In order to specify a config file use redis-server /path/to/redis.conf
1:M 22 Apr 2025 09:48:59.262 * monotonic clock: POSIX clock_gettime
1:M 22 Apr 2025 09:48:59.265 * Running mode=standalone, port=6379.
1:M 22 Apr 2025 09:48:59.265 * Server initialized
1:M 22 Apr 2025 09:48:59.266 * Ready to accept connections tcp

C:\Users\hp\PES2UG22CS188_PES2UG22CS132_PES2UG22CS127_PES2UG22CS164_Load-Balanced_URL_Shortener>curl -X POST http://localhost:5000/shorten -H Content-Type: application
/json" -d "{\"url\":\"https://pes.edu/\"}"
{"short_url":"http://127.0.0.1:5000/h34c8M"}
```

WEEK 2-3
SS

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redis                    ClusterIP      10.109.147.56    <none>         6379/TCP        6h37m
redis-service            ClusterIP      10.110.44.140    <none>         6379/TCP        6h35m
url-shortener-service    LoadBalancer   10.103.210.254   127.0.0.1      5000:30814/TCP  6h35m

C:\Users\hp\PES2UG22CS188_PES2UG22CS132_PES2UG22CS127_PES2UG22CS164_Load-Balanced_URL_Shortener> kubectl autoscale deployment url-shortener --cpu-percent=50 --min=3 --m
ax=6
Error from server (AlreadyExists): horizontalpodautoscalers.autoscaling "url-shortener" already exists

C:\Users\hp\PES2UG22CS188_PES2UG22CS132_PES2UG22CS127_PES2UG22CS164_Load-Balanced_URL_Shortener>kubectl get podskubectl logs redis-5f86f8f9c7-vj8mm
error: the server doesn't have a resource type "podskubectl"

C:\Users\hp\PES2UG22CS188_PES2UG22CS132_PES2UG22CS127_PES2UG22CS164_Load-Balanced_URL_Shortener>kubectl get pods
NAME                                     READY   STATUS      RESTARTS        AGE
ab-stress-test-rzwqm                     0/1     Completed   0               6h28m
nginx-deployment-pes2ug22cs132-9d4cfb889-g76lm   1/1   Running   6 (3h20m ago)   35d
nginx-deployment-pes2ug22cs132-9d4cfb889-wjkbh   1/1   Running   6 (3h20m ago)   35d
redis-5f86f8f9c7-vj8mm                   1/1     Running     1 (3h20m ago)   6h39m
url-shortener-5f4597c48-cv9fv            1/1     Running     1 (3h20m ago)   6h37m
url-shortener-5f4597c48-l8knj            1/1     Running     1 (3h20m ago)   6h37m
url-shortener-5f4597c48-rsn5b            1/1     Running     1 (3h20m ago)   6h37m

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1:C 22 Apr 2025 09:48:59.261 * oO0OoO0OoO0Oo Redis is starting oO0OoO0OoO0Oo
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C:\Users\hp\PES2UG22CS188_PES2UG22CS132_PES2UG22CS127_PES2UG22CS164_Load-Balanced_URL_Shortener>curl -X POST http://localhost:5000/shorten -H "Content-Type: application
/json" -d "{\"url\":\"https://pes.edu/\"}"
{"short_url":"http://127.0.0.1:5000/h34c8M"}

C:\Users\hp\PES2UG22CS188_PES2UG22CS132_PES2UG22CS127_PES2UG22CS164_Load-Balanced_URL_Shortener>kubectl exec -it redis-5f86f8f9c7-vj8mm -- redis-cli
127.0.0.1:6379> keys *
1) "h34c8M"
127.0.0.1:6379>

C:\Users\hp\PES2UG22CS188_PES2UG22CS132_PES2UG22CS127_PES2UG22CS164_Load-Balanced_URL_Shortener>kubectl apply -f k8s/stress-test-job.yaml
job.batch/ab-stress-test unchanged

C:\Users\hp\PES2UG22CS188_PES2UG22CS132_PES2UG22CS127_PES2UG22CS164_Load-Balanced_URL_Shortener>kubectl get hpa       Activate Windows
NAME            REFERENCE                  TARGETS       MINPODS  MAXPODS  REPLICAS  AGE    Go to Settings to activate Windows.
url-shortener   Deployment/url-shortener   cpu: 1%/50%   3        6        3         6h40m
```