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Link: https://github.com/gordonfgz/CS3219_OTOT_A3.git

I followed instructions from

<https://kubernetes.io/docs/tasks/run-application/horizontal-pod-autoscale-walkthrough/>

and set up the Dockerfile, index.php page and php-apache.yaml

```
PS C:\Users\gordo\OneDrive\Desktop\School\CS3219\OTOT_TASK_A3> kubectl get hpa
NAME          REFERENCE          TARGETS  MINPODS  MAXPODS  REPLICAS  AGE
php-apache    Deployment/php-apache  0%/50%   1         10        1          20m

PS C:\Users\gordo\OneDrive\Desktop\School\CS3219\OTOT_TASK_A3> kubectl run -i --tty load-generator --rm --image=busybox --rest
art=Never -- /bin/sh -c "while sleep 0.01; do wget -q -O- http://php-apache; done"
If you don't see a command prompt, try pressing enter.
OK!OK!OK!OK!OK!OK!OK!OK!OK!OK!OK!OK!OK!OK!OK!OK!OK!OK!OK!OK!OK!OK!OK!OK!OK!OK!OK!OK!OK!OK!OK!OK!OK!OK!OK!OK!OK!OK!OK!OK!OK!
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PS C:\Users\gordo\OneDrive\Desktop\School\CS3219\OTOT_TASK_A3> kubectl get hpa
NAME          REFERENCE          TARGETS  MINPODS  MAXPODS  REPLICAS  AGE
php-apache    Deployment/php-apache  250%/50%  1         10        1          21m
```

Initial commands to run:

```
kubectl apply -f components.yaml
```

```
kubectl apply -f php-apache.yaml
```

```
kubectl delete pod load-generator
```

```
kubectl get hpa
```

Run this command in a separate terminal:

```
kubectl run -i --tty load-generator --rm --image=busybox --restart=Never -- /bin/sh -c "while sleep 0.01;
do wget -q -O- http://php-apache; done"
```

After that, wait for abit and run kubectl get hpa again in a free terminal.

basic ingress:

```
! ingress-resource-backend.yaml {} package-lock.json ! ingress.yaml X index.php
! ingress.yaml
1  apiVersion: networking.k8s.io/v1
2  kind: Ingress
3  metadata:
4    name: nginx-test
5    annotations:
6      kubernetes.io/ingress.class: nginx
7      nginx.ingress.kubernetes.io/ssl-redirect: "false"
8      nginx.ingress.kubernetes.io/affinity: "cookie"
9      nginx.ingress.kubernetes.io/session-cookie-name: "route"
10     nginx.ingress.kubernetes.io/session-cookie-expires: "172800"
11     nginx.ingress.kubernetes.io/session-cookie-max-age: "172800"
12     nginx.ingress.kubernetes.io/session-cookie-path: /ingress-test
13
14  spec:
15    rules:
16      - host: stickyingress.example.com
17        http:
18          paths:
19            - path: /
20              pathType: Prefix
21              backend:
22                service:
23                  name: php-apache
24                  port:
25                    number: 8000
```