Lab 7
KNative - First Service
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1. Create service from hello.yaml

```
C:\Users\Darigan\Projects\KNative>kubectl apply -f hello.yaml
service.serving.knative.dev/hello created
```

2. View a list of Knative Services

```
C:\Users\Darigan\Projects\KNative>kn service list
NAME    URL                                       LATEST       AGE   CONDITIONS   READY   REASON
hello   http://hello.default.127.0.0.1.sslip.io   hello-00001  30s   3 OK / 3     True
```

3. Access KN Service

```
Darigan@Cocoon MINGW64 ~/Projects/KNative
$ echo "Accessing URL $(kn service describe hello -o url)"
curl "$(kn service describe hello -o url)"
Accessing URL http://hello.default.127.0.0.1.sslip.io
Hello World!
```

4. Observe autoscaling

```
C:\Users\Darigan\Projects\KNative>kubectl get pod -l serving.knative.dev/service=hello -w
NAME                                      READY   STATUS        RESTARTS   AGE
hello-00001-deployment-5c86475dd-4l7d4    2/2     Running       0          38s
hello-00001-deployment-5c86475dd-4l7d4    2/2     Terminating   0          63s
hello-00001-deployment-5c86475dd-4l7d4    1/2     Terminating   0          91s
hello-00001-deployment-5c86475dd-4l7d4    0/2     Terminating   0          94s
hello-00001-deployment-5c86475dd-4l7d4    0/2     Terminating   0          94s
hello-00001-deployment-5c86475dd-4l7d4    0/2     Terminating   0          94s
hello-00001-deployment-5c86475dd-4l7d4    0/2     Terminating   0          94s
```

5. Scale up KNative Service

```
hello-00001-deployment-5c86475dd-fmrn2    0/2     Pending            0          0s
hello-00001-deployment-5c86475dd-fmrn2    0/2     Pending            0          0s
hello-00001-deployment-5c86475dd-fmrn2    0/2     ContainerCreating  0          0s
hello-00001-deployment-5c86475dd-fmrn2    1/2     Running            0          1s
hello-00001-deployment-5c86475dd-fmrn2    2/2     Running            0          1s
```

6. Create & Deploy new Revision

```
C:\Users\Darigan\Projects\KNative>kubectl apply -f hello.yaml
Warning: Kubernetes default value is insecure, Knative may default this to secure in a future release: spec.template.spec.containers[0].securityContext.allo
wPrivilegeEscalation, spec.template.spec.containers[0].securityContext.capabilities, spec.template.spec.containers[0].securityContext.runAsNonRoot, spec.tem
plate.spec.containers[0].securityContext.seccompProfile
service.serving.knative.dev/hello configured
```

7. Access new revision

```
Darigan@Cocoon MINGW64 ~/Projects/KNative
$ echo "Accessing URL $(kn service describe hello -o url)"
curl "$(kn service describe hello -o url)"
Accessing URL http://hello.default.127.0.0.1.sslip.io
Hello Knative!
```

8. View a list of revisions

```
C:\Users\Darigan\Projects\KNative>kn revisions list
NAME           SERVICE   TRAFFIC   TAGS   GENERATION   AGE      CONDITIONS   READY   REASON
hello-00002    hello     100%             2            59s      4 OK / 4     True
hello-00001    hello                      1            7m27s    3 OK / 4     True
```

9. Splitting traffic between 2 revisions

```
C:\Users\Darigan\Projects\KNative>kubectl apply -f hello.yaml
Warning: Kubernetes default value is insecure, Knative may default this to secure in a future release: spec.template.spec.containers[0].securityContext.allo
wPrivilegeEscalation, spec.template.spec.containers[0].securityContext.capabilities, spec.template.spec.containers[0].securityContext.runAsNonRoot, spec.tem
plate.spec.containers[0].securityContext.seccompProfile
service.serving.knative.dev/hello configured
```

10. View traffic revision split is 50/50

```
C:\Users\Darigan\Projects\KNative>kn revisions list
NAME           SERVICE   TRAFFIC   TAGS   GENERATION   AGE      CONDITIONS   READY   REASON
hello-00002    hello     50%              2            2m       3 OK / 4     True
hello-00001    hello     50%              1            8m28s    3 OK / 4     True
```

11. Accessing two different revisions

```
Darigan@Cocoon MINGW64 ~/Projects/KNative
$ echo "Accessing URL $(kn service describe hello -o url)"
curl "$(kn service describe hello -o url)"
Accessing URL http://hello.default.127.0.0.1.sslip.io
Hello Knative!

Darigan@Cocoon MINGW64 ~/Projects/KNative
$ echo "Accessing URL $(kn service describe hello -o url)"
curl "$(kn service describe hello -o url)"
Accessing URL http://hello.default.127.0.0.1.sslip.io
Hello World!
```

12. X