7.2. PASSING COMMAND-LINE ARGUMENTS TO CONTAINERS

Step:1Fortune script with interval configurable through argument: fortune-args/fortuneloop.sh

```
mansishah@macbookpro ~ % mkdir fortune-args
mansishah@macbookpro ~ % cd fortune-args
mansishah@macbookpro fortune-args % vim fortuneloop.sh
mansishah@macbookpro fortune-args % cat fortuneloop.sh
#!/bin/bash
trap "exit" SIGINT
INTERVAL=$1
echo Configured to generate new fortune every $INTERVAL seconds
mkdir -p /var/htdocs
while :
do
  echo $(date) Writing fortune to /var/htdocs/index.html
  /usr/games/fortune > /var/htdocs/index.html
  sleep $INTERVAL
done
mansishah@macbookpro fortune-args % █
```

Step2: Dockerfile for the updated fortune image: fortune-args/Dockerfile

```
mansishah@macbookpro fortune-args % vim Dockerfile
mansishah@macbookpro fortune-args % cat Dockerfile
FROM ubuntu:latest
RUN apt-get update ; apt-get -y install fortune
ADD fortuneloop.sh /bin/fortuneloop.sh
ENTRYPOINT ["/bin/fortuneloop.sh"]
CMD ["10"]
mansishah@macbookpro fortune-args % chmod 777 fortuneloop.sh
mansishah@macbookpro fortune-args % chmod 777 Dockerfile
mansishah@macbookpro fortune-args % ls -al
total 16
drwxr-xr-x   4 mansishah  staff  128 Mar 20 02:12 .
drwxr-xr-x+ 22 mansishah  staff  704 Mar 20 02:12 ..
-rwxrwxrwx   1 mansishah  staff  152 Mar 20 02:12 Dockerfile
-rwxrwxrwx   1 mansishah  staff  265 Mar 20 02:10 fortuneloop.sh
mansishah@macbookpro fortune-args % []
```

Step3: You can now build and push the image to Docker Hub

```
mansishah@macbookpro fortune-args % docker build -t mansi2210/shahm888:fortune_args .
Sending build context to Docker daemon  3.072kB
Step 1/5 : FROM ubuntu:latest
 ---> 72300a873c2c
Step 2/5 : RUN apt-get update ; apt-get -y install fortune
 ---> Using cache
 ---> 155e2402551e
Step 3/5 : ADD fortuneloop.sh /bin/fortuneloop.sh
 ---> 92a7e1ea8fcb
Step 4/5 : ENTRYPOINT ["/bin/fortuneloop.sh"]
 ---> Running in accd652e5884
Removing intermediate container accd652e5884
 ---> 12d0a878c6ef
Step 5/5 : CMD ["10"]
 ---> Running in 7a27219b6481
Removing intermediate container 7a27219b6481
 ---> a18cb8d1782e
Successfully built a18cb8d1782e
Successfully tagged mansi2210/shahm888:fortune_args
mansishah@macbookpro fortune-args % docker push mansi2210/shahm888:fortune_args
The push refers to repository [docker.io/mansi2210/shahm888]
17f0122c00e1: Pushed
56cf16917be6: Layer already exists
1852b2300972: Layer already exists
03c9b9f537a4: Layer already exists
8c98131d2d1d: Layer already exists
cc4590d6a718: Layer already exists
fortune_args: digest: sha256:1e9f695febcd392a3991e94cbe05a1566e0289d7fa5900e1828e805c93515545 size: 1571
mansishah@macbookpro fortune-args % 
```

```
mansishah@macbookpro fortune-args % docker run -it mansi2210/shahm888:fortune_args
Configured to generate new fortune every 10 seconds
Fri Mar 20 09:15:04 UTC 2020 Writing fortune to /var/htdocs/index.html
^C
mansishah@macbookpro fortune-args % docker run -it mansi2210/shahm888:fortune_args 15
Configured to generate new fortune every 15 seconds
Fri Mar 20 09:15:09 UTC 2020 Writing fortune to /var/htdocs/index.html
^C
mansishah@macbookpro fortune-args % 
```

Step:4 Passing an argument in the pod definition: fortune-pod-args.yaml

```
mansishah@macbookpro fortune-args % vim fortune-pod-args.yaml
mansishah@macbookpro fortune-args % chmod 777 fortune-pod-args.yaml
mansishah@macbookpro fortune-args % cat fortune-pod-args.yaml
apiVersion: v1
kind: Pod
metadata:
  name: fortune
spec:
  containers:
  - image: mansi2210/shahm888:fortune_args
    args: ["2"]
    name: html-generator
    volumeMounts:
    - name: html
      mountPath: /var/htdocs
  - image: nginx:alpine
    name: web-server
    volumeMounts:
    - name: html
      mountPath: /usr/share/nginx/html
      readOnly: true
    ports:
    - containerPort: 80
      protocol: TCP
  volumes:
  - name: html
    emptyDir: {}
mansishah@macbookpro fortune-args % kubectl create -f fortune-pod-args.yaml
pod/fortune created
mansishah@macbookpro fortune-args % kubectl get pods
NAME       READY    STATUS     RESTARTS    AGE
fortune    2/2      Running    0           10s
mansishah@macbookpro fortune-args % []
```

Every 2 seconds generate a new fortune

```
mansishah@macbookpro fortune-args % kubectl logs fortune -c html-generator
Configured to generate new fortune every 2 seconds
Fri Mar 20 09:19:05 UTC 2020 Writing fortune to /var/htdocs/index.html
Fri Mar 20 09:19:07 UTC 2020 Writing fortune to /var/htdocs/index.html
Fri Mar 20 09:19:09 UTC 2020 Writing fortune to /var/htdocs/index.html
Fri Mar 20 09:19:11 UTC 2020 Writing fortune to /var/htdocs/index.html
Fri Mar 20 09:19:13 UTC 2020 Writing fortune to /var/htdocs/index.html
Fri Mar 20 09:19:15 UTC 2020 Writing fortune to /var/htdocs/index.html
Fri Mar 20 09:19:17 UTC 2020 Writing fortune to /var/htdocs/index.html
Fri Mar 20 09:19:19 UTC 2020 Writing fortune to /var/htdocs/index.html
Fri Mar 20 09:19:21 UTC 2020 Writing fortune to /var/htdocs/index.html
Fri Mar 20 09:19:23 UTC 2020 Writing fortune to /var/htdocs/index.html
Fri Mar 20 09:19:25 UTC 2020 Writing fortune to /var/htdocs/index.html
Fri Mar 20 09:19:27 UTC 2020 Writing fortune to /var/htdocs/index.html
Fri Mar 20 09:19:29 UTC 2020 Writing fortune to /var/htdocs/index.html
Fri Mar 20 09:19:31 UTC 2020 Writing fortune to /var/htdocs/index.html
Fri Mar 20 09:19:33 UTC 2020 Writing fortune to /var/htdocs/index.html
Fri Mar 20 09:19:35 UTC 2020 Writing fortune to /var/htdocs/index.html
Fri Mar 20 09:19:37 UTC 2020 Writing fortune to /var/htdocs/index.html
Fri Mar 20 09:19:39 UTC 2020 Writing fortune to /var/htdocs/index.html
Fri Mar 20 09:19:42 UTC 2020 Writing fortune to /var/htdocs/index.html
Fri Mar 20 09:19:44 UTC 2020 Writing fortune to /var/htdocs/index.html
Fri Mar 20 09:19:46 UTC 2020 Writing fortune to /var/htdocs/index.html
Fri Mar 20 09:19:48 UTC 2020 Writing fortune to /var/htdocs/index.html
Fri Mar 20 09:19:50 UTC 2020 Writing fortune to /var/htdocs/index.html
Fri Mar 20 09:19:52 UTC 2020 Writing fortune to /var/htdocs/index.html
Fri Mar 20 09:19:54 UTC 2020 Writing fortune to /var/htdocs/index.html
```