Screenshots
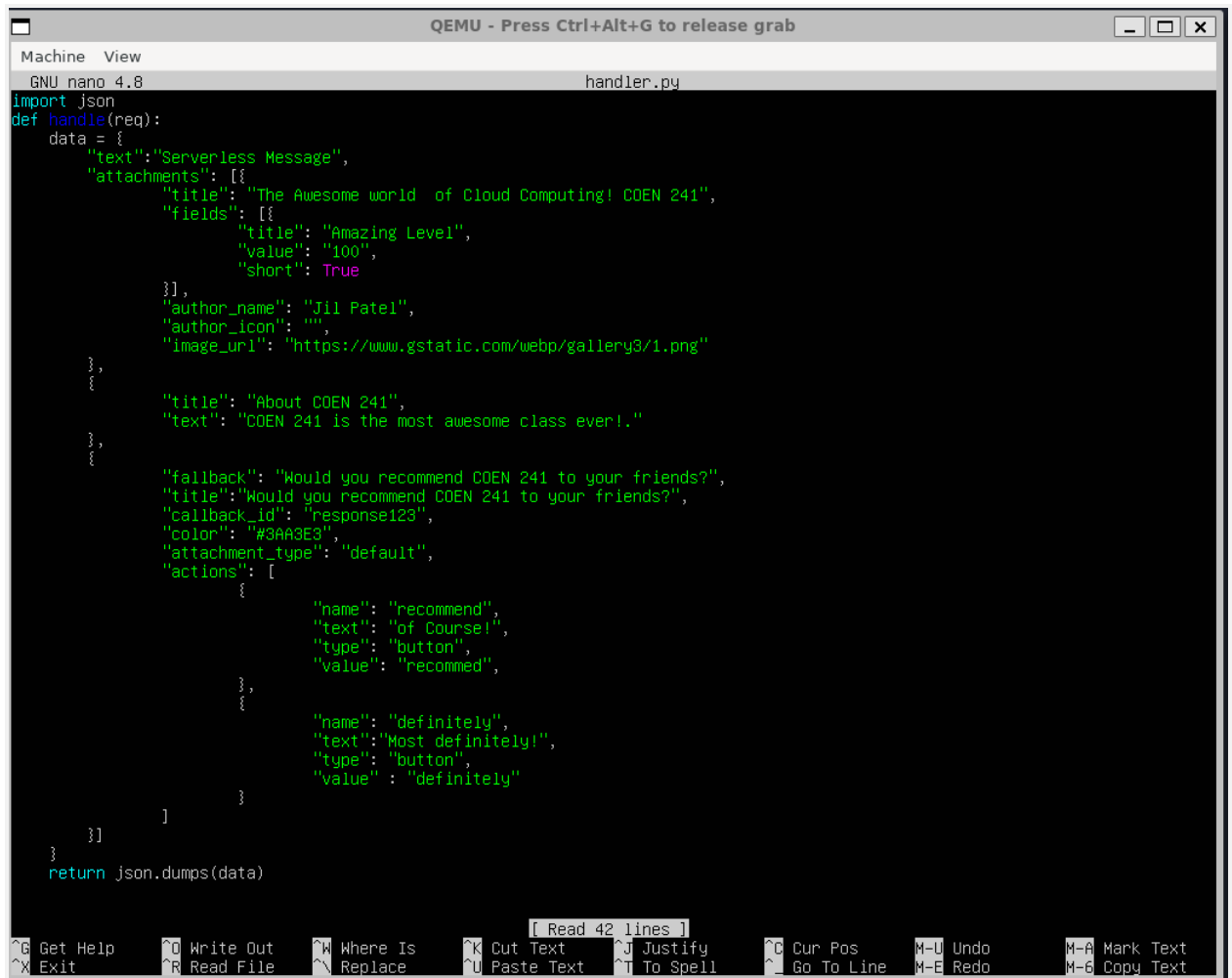
1) Provide a screenshot of invoking the figlet function (10 pts)
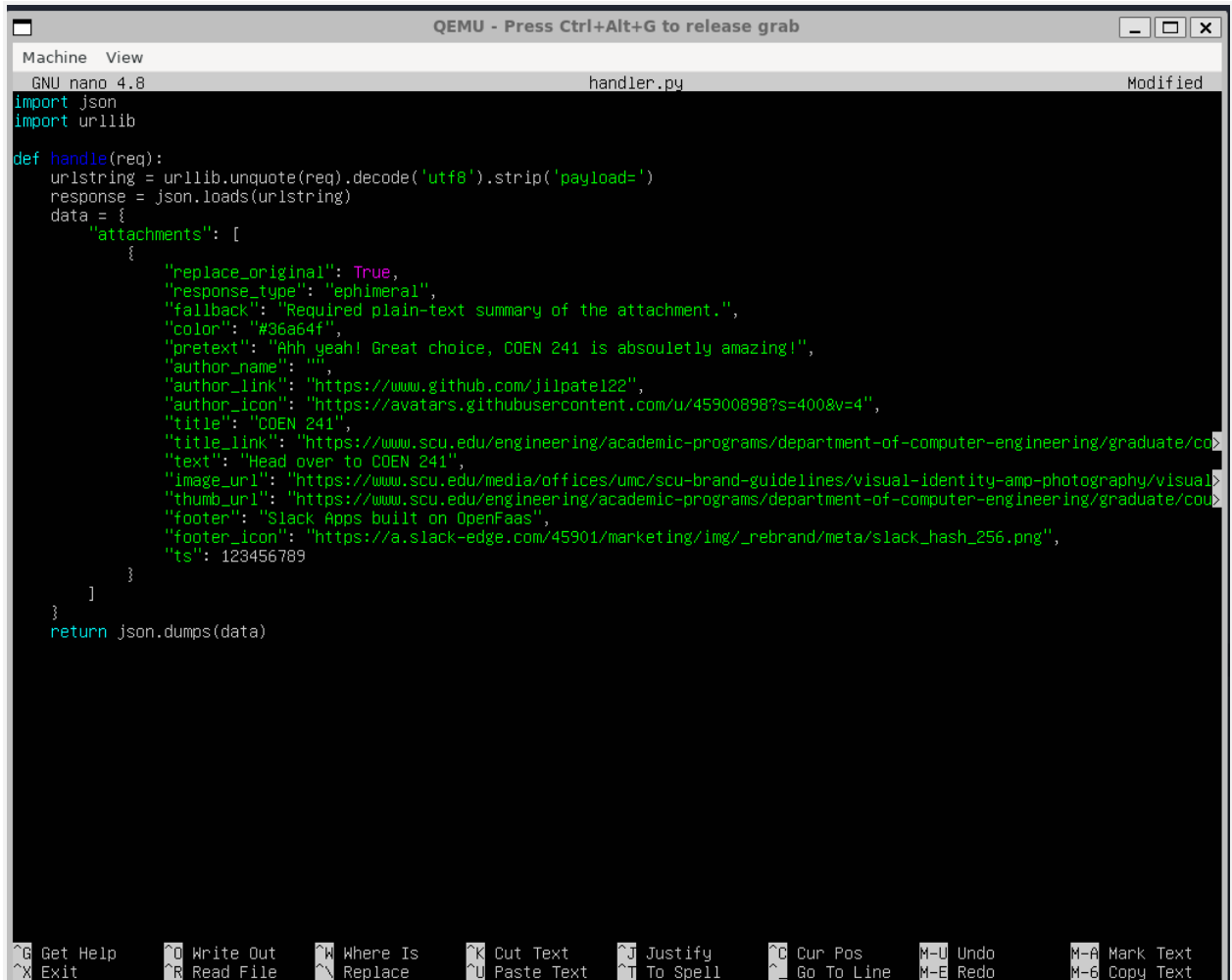
```
jil@ubuntu:~/faasd$ echo "Hello, Faas, World" | faas-cli invoke figlet
```


2) Complete slack-request/handler.py (20 pt)

3) Complete slack-interactive/handler.py (20 pt)

```
GNU nano 4.8                              handler.py                              Modified
import json
import urllib

def handle(req):
    urlstring = urllib.unquote(req).decode('utf8').strip('payload=')
    response = json.loads(urlstring)
    data = {
        "attachments": [
            {
                "replace_original": True,
                "response_type": "ephimeral",
                "fallback": "Required plain-text summary of the attachment.",
                "color": "#36a64f",
                "pretext": "Ahh yeah! Great choice, COEN 241 is absouletly amazing!",
                "author_name": "",
                "author_link": "https://www.github.com/jilpate122",
                "author_icon": "https://avatars.githubusercontent.com/u/45900898?s=400&v=4",
                "title": "COEN 241",
                "title_link": "https://www.scu.edu/engineering/academic-programs/department-of-computer-engineering/graduate/co
                "text": "Head over to COEN 241",
                "image_url": "https://www.scu.edu/media/offices/umc/scu-brand-guidelines/visual-identity-amp-photography/visual
                "thumb_url": "https://www.scu.edu/engineering/academic-programs/department-of-computer-engineering/graduate/cou
                "footer": "Slack Apps built on OpenFaas",
                "footer_icon": "https://a.slack-edge.com/45901/marketing/img/_rebrand/meta/slack_hash_256.png",
                "ts": 123456789
            }
        ]
    }
    return json.dumps(data)
```

4) Provide a screenshot of running the following command (10 pts)

```
sudo journalctl -u faasd --lines 40
```

```
jil@ubuntu:~/faasd$ sudo journalctl -u faasd --lines 40
-- Logs begin at Fri 2023-02-17 03:25:05 UTC, end at Fri 2023-02-17 03:48:39 UTC. --
Feb 17 03:35:19 ubuntu faasd[2523]: 2023/02/17 03:35:19 - gateway
Feb 17 03:35:19 ubuntu faasd[2523]: 2023/02/17 03:35:19 - queue-worker
Feb 17 03:35:19 ubuntu faasd[2523]: Starting: nats
Feb 17 03:35:19 ubuntu faasd[2523]: Creating local directory: /var/lib/faasd/nats
Feb 17 03:35:19 ubuntu faasd[2523]: 2023/02/17 03:35:19 Running nats with user: "65534"
Feb 17 03:35:19 ubuntu faasd[2523]: 2023/02/17 03:35:19 Created container: nats
Feb 17 03:35:24 ubuntu faasd[2523]: 2023/02/17 03:35:24 nats has IP: 10.62.0.2
Feb 17 03:35:24 ubuntu faasd[2523]: 2023/02/17 03:35:24 Task: nats          Container: nats
Feb 17 03:35:24 ubuntu faasd[2523]: Starting: prometheus
Feb 17 03:35:24 ubuntu faasd[2523]: Creating local directory: /var/lib/faasd/prometheus
Feb 17 03:35:24 ubuntu faasd[2523]: 2023/02/17 03:35:24 Running prometheus with user: "65534"
Feb 17 03:35:25 ubuntu faasd[2523]: 2023/02/17 03:35:25 Created container: prometheus
Feb 17 03:35:28 ubuntu faasd[2523]: 2023/02/17 03:35:28 prometheus has IP: 10.62.0.3
Feb 17 03:35:28 ubuntu faasd[2523]: 2023/02/17 03:35:28 Task: prometheus       Container: prometheus
Feb 17 03:35:28 ubuntu faasd[2523]: Starting: basic-auth-plugin
Feb 17 03:35:29 ubuntu faasd[2523]: 2023/02/17 03:35:29 Created container: basic-auth-plugin
Feb 17 03:35:32 ubuntu faasd[2523]: 2023/02/17 03:35:32 basic-auth-plugin has IP: 10.62.0.4
Feb 17 03:35:32 ubuntu faasd[2523]: 2023/02/17 03:35:32 Task: basic-auth-plugin        Container: basic-auth-plugin
Feb 17 03:35:32 ubuntu faasd[2523]: Starting: gateway
Feb 17 03:35:32 ubuntu faasd[2523]: 2023/02/17 03:35:32 Created container: gateway
Feb 17 03:35:34 ubuntu faasd[2523]: 2023/02/17 03:35:34 gateway has IP: 10.62.0.5
Feb 17 03:35:34 ubuntu faasd[2523]: 2023/02/17 03:35:34 Task: gateway          Container: gateway
Feb 17 03:35:34 ubuntu faasd[2523]: Starting: queue-worker
Feb 17 03:35:35 ubuntu faasd[2523]: 2023/02/17 03:35:35 Created container: queue-worker
Feb 17 03:35:37 ubuntu faasd[2523]: 2023/02/17 03:35:37 queue-worker has IP: 10.62.0.6
Feb 17 03:35:37 ubuntu faasd[2523]: 2023/02/17 03:35:37 Task: queue-worker         Container: queue-worker
Feb 17 03:35:37 ubuntu faasd[2523]: 2023/02/17 03:35:37 Supervisor init done in: About a minute
Feb 17 03:35:37 ubuntu faasd[2523]: 2023/02/17 03:35:37 Looking up IP for: "gateway"
Feb 17 03:35:37 ubuntu faasd[2523]: 2023/02/17 03:35:37 Resolver rebuilding map
Feb 17 03:35:37 ubuntu faasd[2523]: 2023/02/17 03:35:37 Resolver: "localhost"="127.0.0.1"
Feb 17 03:35:37 ubuntu faasd[2523]: 2023/02/17 03:35:37 Resolver: "faasd-provider"="10.62.0.1"
Feb 17 03:35:37 ubuntu faasd[2523]: 2023/02/17 03:35:37 Looking up IP for: "prometheus"
Feb 17 03:35:37 ubuntu faasd[2523]: 2023/02/17 03:35:37 faasd: waiting for SIGTERM or SIGINT
Feb 17 03:35:37 ubuntu faasd[2523]: 2023/02/17 03:35:37 Resolver: "nats"="10.62.0.2"
Feb 17 03:35:37 ubuntu faasd[2523]: 2023/02/17 03:35:37 Resolver: "prometheus"="10.62.0.3"
Feb 17 03:35:37 ubuntu faasd[2523]: 2023/02/17 03:35:37 Resolver: "basic-auth-plugin"="10.62.0.4"
Feb 17 03:35:37 ubuntu faasd[2523]: 2023/02/17 03:35:37 Resolver: "gateway"="10.62.0.5"
Feb 17 03:35:37 ubuntu faasd[2523]: 2023/02/17 03:35:37 Resolver: "queue-worker"="10.62.0.6"
Feb 17 03:35:37 ubuntu faasd[2523]: 2023/02/17 03:35:37 Proxy from: 127.0.0.1:9090, to: prometheus:9090 (10.62.0.3)
Feb 17 03:35:38 ubuntu faasd[2523]: 2023/02/17 03:35:38 Proxy from: 0.0.0.0:8080, to: gateway:8080 (10.62.0.5)
jil@ubuntu:~/faasd$ _
```

5) Provide a screenshot of your OpenFaaS gateway AFTER deploying figlet, slack-handler and slack-interactive functions (10 pts)

figlet

```
jil@ubuntu:~/faasd$ faas-cli store deploy figlet

Deployed. 200 OK.
URL: http://127.0.0.1:8080/function/figlet

jil@ubuntu:~/faasd$
```

Slack-request

```
jil@ubuntu:~/functions$ sudo faas-cli deploy -f ./slack-request.yml
Deploying: slack-request.

Unauthorized access, run "faas-cli login" to setup authentication for this server

Function 'slack-request' failed to deploy with status code: 401
jil@ubuntu:~/functions$ faas-cli deploy -f ./slack-request.yml
Deploying: slack-request.

Deployed. 200 OK.
URL: http://127.0.0.1:8080/function/slack-request

jil@ubuntu:~/functions$
```

Slack-interactive


```
jil@ubuntu:~/functions$ faas-cli deploy -f ./slack-interactive.yml
Deploying: slack-interactive.

Deployed. 200 OK.
URL: http://127.0.0.1:8080/function/slack-interactive

jil@ubuntu:~/functions$ _
```

6) Provide a screenshot of invoking slack-request and slack-interactive functions (10 pts)


```
faas-cli: command not found
jil@ubuntu:~/functions/slack-interactive$ faas-cli invoke slack-request
Reading from STDIN - hit (Control + D) to stop.

{"text": "Serverless Message", "attachments": [{"fields": [{"short": true, "value": "100", "title": "Amazing Level"}], "author_i
con": "", "image_url": "https://www.gstatic.com/webp/gallery3/1.png", "author_name": "Jil Patel", "title": "The Awesome world  o
f Cloud Computing! COEN 241"}, {"text": "COEN 241 is the most awesome class ever!.", "title": "About COEN 241"}, {"title": "Woul
d you recommend COEN 241 to your friends?", "color": "#3AA3E3", "actions": [{"text": "of Course!", "type": "button", "name": "re
commend", "value": "recommed"}, {"text": "Most definitely!", "type": "button", "name": "definitely", "value": "definitely"}], "c
allback_id": "response123", "fallback": "Would you recommend COEN 241 to your friends?", "attachment_type": "default"}]}
jil@ubuntu:~/functions/slack-interactive$
```



```
jil@ubuntu:~/functions/slack-interactive$ faas-cli invoke slack-interactive
Reading from STDIN - hit (Control + D) to stop.
{"attachments": [{"footer": "Slack Apps built on OpenFaas", "author_link": "https://www.github.com/jilpatel22", "color": "#36a64
f", "text": "Head over to COEN 241", "title": "COEN 241", "ts": 123456789, "author_name": "", "title_link": "https://www.scu.edu
/engineering/academic-programs/department-of-computer-engineering/graduate/course-description/", "image_url": "https://www.scu.e
du/media/offices/umc/scu-brand-guidelines/visual-identity-amp-photography/visual-identity-toolkit/logos-amp-seals/Mission-Dont3.
png", "response_type": "ephimeral", "replace_original": true, "footer_icon": "https://a.slack-edge.com/45901/marketing/img/_rebr
and/meta/slack_hash_256.png", "pretext": "Ahh yeah! Great choice, COEN 241 is absouletly amazing!", "fallback": "Required plain-
text summary of the attachment.", "thumb_url": "https://www.scu.edu/engineering/academic-programs/department-of-computer-enginee
ring/graduate/course-description/", "author_icon": "https://avatars.githubusercontent.com/u/45900898?s=400&v=4"}]}
jil@ubuntu:~/functions/slack-interactive$
```