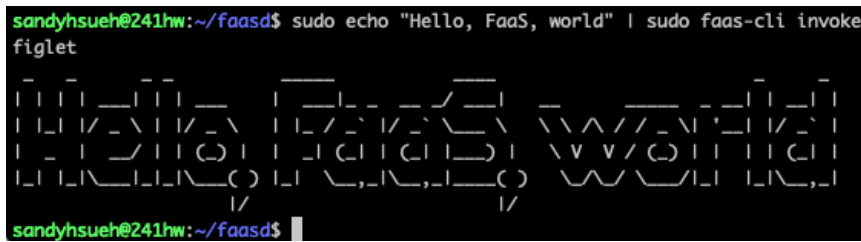
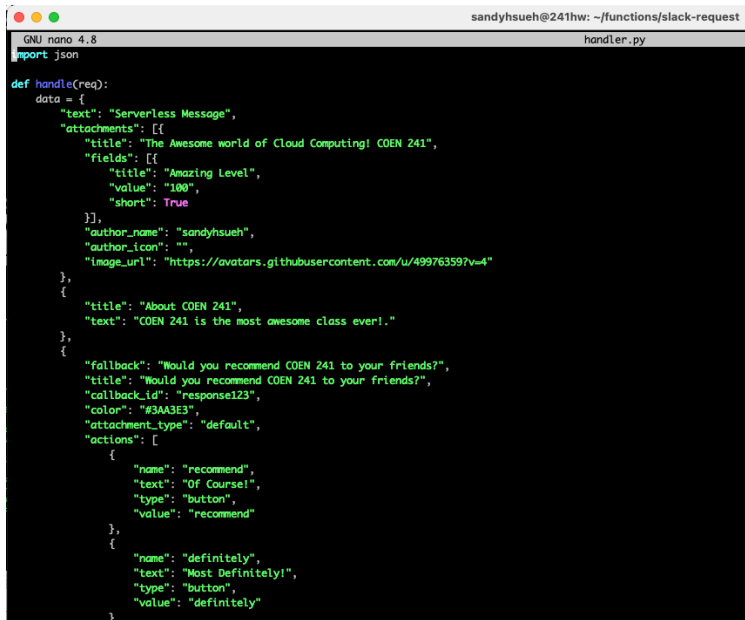


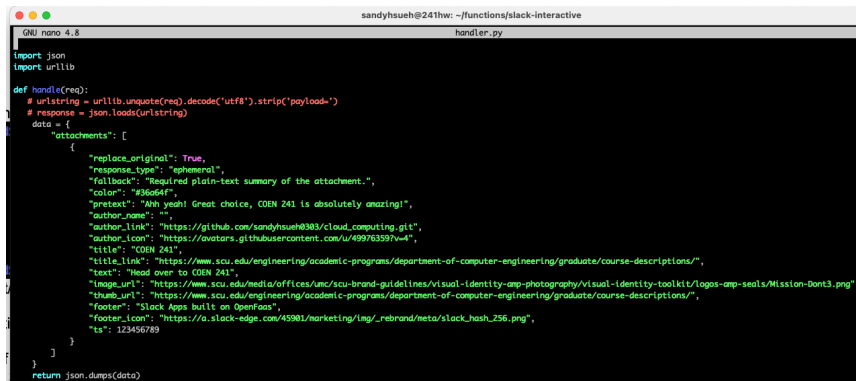
- Provide a screenshot of invoking the figlet function (10 pts)



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



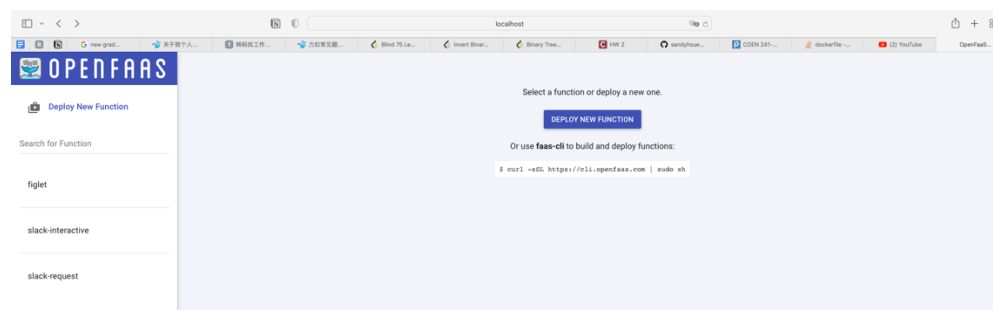
- Complete slack-interactive/handler.py (20 pt)



- Provide a screenshot of running the following command (10 pts)  
`sudo journalctl -u faasd --lines 40`

```
sandyhsueh@241hw:~/functions$ sudo journalctl -u faasd --lines 40
-- Logs begin at Mon 2022-04-11 21:14:42 UTC, end at Wed 2022-05-11 05:40:00 UTC. --
May 10 22:51:50 241hw faasd[773]: 2022/05/10 22:51:50 - gateway
May 10 22:51:50 241hw faasd[773]: 2022/05/10 22:51:50 - queue-worker
May 10 22:51:50 241hw faasd[773]: Starting: nats
May 10 22:51:50 241hw faasd[773]: Creating local directory: /var/lib/faasd/nats
May 10 22:51:50 241hw faasd[773]: 2022/05/10 22:51:50 Running nats with user: "65534"
May 10 22:51:50 241hw faasd[773]: 2022/05/10 22:51:50 Created container: nats
May 10 22:51:51 241hw faasd[773]: 2022/05/10 22:51:51 nats has IP: 10.62.0.2
May 10 22:51:51 241hw faasd[773]: 2022/05/10 22:51:51 Task: nats Container: nats
May 10 22:51:51 241hw faasd[773]: Starting: prometheus
May 10 22:51:51 241hw faasd[773]: Creating local directory: /var/lib/faasd/prometheus
May 10 22:51:51 241hw faasd[773]: 2022/05/10 22:51:51 Running prometheus with user: "65534"
May 10 22:51:51 241hw faasd[773]: 2022/05/10 22:51:51 Created container: prometheus
May 10 22:51:52 241hw faasd[773]: 2022/05/10 22:51:52 prometheus has IP: 10.62.0.3
May 10 22:51:52 241hw faasd[773]: 2022/05/10 22:51:52 Task: prometheus Container: prometheus
May 10 22:51:52 241hw faasd[773]: Starting: basic-auth-plugin
May 10 22:51:52 241hw faasd[773]: 2022/05/10 22:51:52 Created container: basic-auth-plugin
May 10 22:51:52 241hw faasd[773]: 2022/05/10 22:51:52 basic-auth-plugin has IP: 10.62.0.4
May 10 22:51:53 241hw faasd[773]: 2022/05/10 22:51:53 Task: basic-auth-plugin Container: basic-auth-plugin
May 10 22:51:53 241hw faasd[773]: Starting: gateway
May 10 22:51:53 241hw faasd[773]: 2022/05/10 22:51:53 Created container: gateway
May 10 22:51:53 241hw faasd[773]: 2022/05/10 22:51:53 gateway has IP: 10.62.0.5
May 10 22:51:53 241hw faasd[773]: 2022/05/10 22:51:53 Task: gateway Container: gateway
May 10 22:51:53 241hw faasd[773]: Starting: queue-worker
May 10 22:51:53 241hw faasd[773]: 2022/05/10 22:51:53 Created container: queue-worker
May 10 22:51:54 241hw faasd[773]: 2022/05/10 22:51:54 queue-worker has IP: 10.62.0.6
May 10 22:51:54 241hw faasd[773]: 2022/05/10 22:51:54 Task: queue-worker Container: queue-worker
May 10 22:51:54 241hw faasd[773]: 2022/05/10 22:51:54 Supervisor init done in: 3 seconds
May 10 22:51:54 241hw faasd[773]: 2022/05/10 22:51:54 Looking up IP for: "gateway"
May 10 22:51:54 241hw faasd[773]: 2022/05/10 22:51:54 Resolver rebuilding map
May 10 22:51:54 241hw faasd[773]: 2022/05/10 22:51:54 Resolver: "localhost"="127.0.0.1"
May 10 22:51:54 241hw faasd[773]: 2022/05/10 22:51:54 Resolver: "faasd-provider"="10.62.0.1"
May 10 22:51:54 241hw faasd[773]: 2022/05/10 22:51:54 Resolver: "nats"="10.62.0.2"
May 10 22:51:54 241hw faasd[773]: 2022/05/10 22:51:54 Resolver: "prometheus"="10.62.0.3"
May 10 22:51:54 241hw faasd[773]: 2022/05/10 22:51:54 Resolver: "basic-auth-plugin"="10.62.0.4"
May 10 22:51:54 241hw faasd[773]: 2022/05/10 22:51:54 Resolver: "gateway"="10.62.0.5"
May 10 22:51:54 241hw faasd[773]: 2022/05/10 22:51:54 Resolver: "queue-worker"="10.62.0.6"
May 10 22:51:54 241hw faasd[773]: 2022/05/10 22:51:54 Looking up IP for: "prometheus"
May 10 22:51:54 241hw faasd[773]: 2022/05/10 22:51:54 Proxy from: 127.0.0.1:9090, to: prometheus:9090 (10.62.0.3)
May 10 22:51:54 241hw faasd[773]: 2022/05/10 22:51:54 faasd: waiting for SIGTERM or SIGINT
May 10 22:51:54 241hw faasd[773]: 2022/05/10 22:51:54 Proxy from: 0.0.0.0:8080, to: gateway:8080 (10.62.0.5)
```

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



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

## Slack-request

```
{
  "text": "Serverless Message",
  "attachments": [
    {
      "fields": [
        {
          "short": true,
          "value": "100",
          "title": "Amazing Level!"
        },
        {
          "author_icon": "",
          "image_url": "https://avatars.githubusercontent.com/u/49976359?v=4",
          "author_name": "sandyhsueh",
          "title": "The Awesome world of Cloud Computing! COEN 241",
          "text": "COEN 241 is the most awesome class ever!.",
          "title": "About COEN 241",
          "color": "#3AA3E3",
          "actions": [
            {
              "text": "Of Course!",
              "type": "button",
              "name": "recommend",
              "value": "recommend",
              "text": "Most Definitely!",
              "type": "button",
              "name": "definitely",
              "value": "definitely"
            },
            {
              "callback_id": "response123",
              "fallback": "Would you recommend COEN 241 to your friends?",
              "attachment_type": "default"
            }
          ]
        }
      ]
    }
  ]
}
```

## Slack-interactive

```
{"attachments": [{"footer": "Slack Apps built on OpenFaas", "author_link":  
"https://github.com/sandyhsueh0303/cloud-computing.git", "color": "#36a64f", "text": "Head over to COEN 241", "title": "COEN  
241", "ts": 123456789, "author_name": "", "title_link": "https://www.scu.edu/engineering/academic-programs/departments-of-  
computer-engineering/graduate/course-descriptions/", "image_url": "https://www.scu.edu/media/offices/umc/scu-brand-  
guidelines/visual-identity-and-photography/visual-identity-toolkit/logos-and-seals/Mission-Dont3.png", "response_type":  
"ephemeral", "replace_original": true, "footer_icon": "https://a.slack-  
edge.com/45901/marketing/img/_rebrand/meta/slack_hash_256.png", "pretext": "Ahh yeah! Great choice, COEN 241 is absolutely  
amazing!", "fallback": "Required plain-text summary of the attachment.", "thumb_url":  
"https://www.scu.edu/engineering/academic-programs/departments-of-computer-engineering/graduate/course-descriptions/",  
"author_icon": "https://avatars.githubusercontent.com/u/49976359?v=4"}]}
```

1. What is the command to invoke the slack-request function?
  - a. via curl
  - b. via faas-cli
2. What is the output you see when you invoke the slack-request function?  
A json file include all the information of the function
3. What is the command to invoke the slack-interactive function?
  - a. via curl
  - b. via faas-cli
4. What is the output you see when you invoke the slack-interactive function?  
A json file include all the information of the function
5. How would you pass different arguments to the functions?  
I will use nano to edit the file inside the functions.
6. How would you change the slack-interactive function to react to different inputs?  
I will use nano to edit the file inside the functions.