<table>
<tr><td></td><td>

Tugas 8
Pemrograman Jaringan (CSH4V3)

Semester Ganjil 2019 - 2020
Dosen: Aulia Arif Wardana, S.Kom., M.T. (UIW)

</td></tr>
</table>

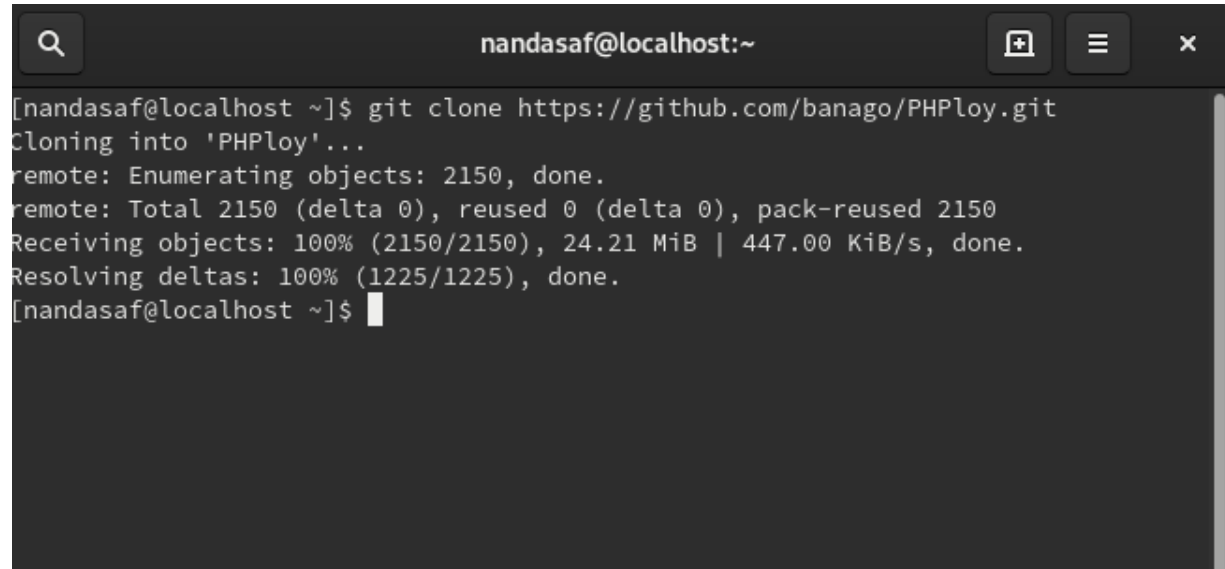|		
Berdo'alah sebelum mengerjakan. Dilarang berbuat curang. *Tugas ini untuk mengukur kemampuan anda, jadi kerjakan dengan sepenuh hati.* *Selamat belajar, semoga sukses !*		
Nama Mahasiswa: **Andi Yulia.H** ………………………………………………………	**NIM:** **1301164235** ………………………………………………	**Nilai:** ……………………
Nama Mahasiswa: **Nanda Safira.I** ………………………………………………………	**NIM:** **1301164322** ………………………………………………	**Nilai:** ……………………
Nama Mahasiswa: **Khulafaur RAsyidin** ………………………………………………………	**NIM:** **1301188571** ………………………………………………	**Nilai:** ……………………

Siapkan tools berikut sebelum mengerjakan:

1. Harus menggunakan linux dengan distro fedora (https://getfedora.org/id/workstation/).
2. Buatlah git repository pada https://github.com/ kemudian push semua kode dan hasil laporan anda ke dalam repository github yang sudah anda buat.
3. Gunakan docker (https://www.docker.com/) dan kubernetes (https://kubernetes.io/id/) untuk membuat container.
4. Kumpulkan link repository github tersebut sebagai tanda bahwa anda mengerjakan tugas modul ini.
5. Link repository harus berbeda untuk setiap tugasnya. Buatlah markdown yang rapi disetiap repository tugas yang anda kumpulkan.
6. Printscreen program harus dari desktop kelompok anda sendiri, dan harus dari linux yang sudah diinstall. Jika tidak, maka harus mengulang pengerjaan tugasnya.
7. Jangan lupa untuk menuliskan NAMA dan NIM pada laporan.
8. Laporan berbentuk PDF dan dikumpulkan pada link repository github beserta kodenya.
9. Walaupun tugas berkelompok tapi pengumpulan link github harus individu, jika tidak mengumpulkan maka dianggap tidak mengerjakan.

Nama:	NIM:	Nilai:

Soal No 1 (Create container from web application)

Buatlah container dari docker dan kubernetes untuk web aplikasi yang telah anda buat pada tugas modul 4 soal nomor 1.

Jawaban:

```
[nandasaf@localhost ~]$ git clone https://github.com/banago/PHPloy.git
Cloning into 'PHPloy'...
remote: Enumerating objects: 2150, done.
remote: Total 2150 (delta 0), reused 0 (delta 0), pack-reused 2150
Receiving objects: 100% (2150/2150), 24.21 MiB | 447.00 KiB/s, done.
Resolving deltas: 100% (1225/1225), done.
[nandasaf@localhost ~]$
```

🔍

```
[nandasaf@localhost ~]$ sudo su
[sudo] password for nandasaf:
[root@localhost nandasaf]# cd Documents
[root@localhost Documents]# cd Tugas8
bash: cd: Tugas8: No such file or directory
[root@localhost Documents]# cd TUGAS8
[root@localhost TUGAS8]# go mod init tugas-docker
go mod init: go.mod already exists
[root@localhost TUGAS8]# go get -u github.com/gorilla/mux
go: finding github.com/xdg/scram v0.0.0-20180814205039-7eeb5667e42c
go: finding github.com/golang/snappy v0.0.1
go: finding github.com/xdg/stringprep v1.0.0
go: finding golang.org/x/sync v0.0.0-20190911185100-cd5d95a43a6e
go: finding golang.org/x/text v0.3.2
go: finding golang.org/x/crypto v0.0.0-20191011191535-87dc89f01550
go: finding go.mongodb.org/mongo-driver v1.1.2
go: finding golang.org/x/tools v0.0.0-20180917221912-90fa682c2a6e
go: finding golang.org/x/net v0.0.0-20190404232315-eb5bcb51f2a3
go: finding golang.org/x/sys v0.0.0-20190412213103-97732733099d
go: finding golang.org/x/text v0.3.0
go: finding golang.org/x/crypto v0.0.0-20190308221718-c2843e01d9a2
go: finding golang.org/x/sys v0.0.0-20190215142949-d0b11bdaac8a
[root@localhost TUGAS8]# go get -u go.mongodb.org/mongo-driver/bson
go: finding go.mongodb.org/mongo-driver/bson latest
[root@localhost TUGAS8]# go get -u go.mongodb.org/mongo-driver/bson/primitive
go: finding go.mongodb.org/mongo-driver/bson/primitive latest
go: finding go.mongodb.org/mongo-driver/bson latest
[root@localhost TUGAS8]# go get -u go.mongodb.org/mongo-driver/mongo
go: finding go.mongodb.org/mongo-driver/mongo latest
go: downloading github.com/golang/snappy v0.0.1
go: downloading github.com/xdg/scram v0.0.0-20180814205039-7eeb5667e42c
go: downloading github.com/xdg/stringprep v1.0.0
go: downloading golang.org/x/sync v0.0.0-20190911185100-cd5d95a43a6e
go: extracting github.com/xdg/scram v0.0.0-20180814205039-7eeb5667e42c
go: downloading golang.org/x/crypto v0.0.0-20191011191535-87dc89f01550
go: extracting github.com/golang/snappy v0.0.1
go: extracting github.com/xdg/stringprep v1.0.0
go: downloading golang.org/x/text v0.3.2
go: extracting golang.org/x/sync v0.0.0-20190911185100-cd5d95a43a6e
go: extracting golang.org/x/crypto v0.0.0-20191011191535-87dc89f01550
go: finding github.com/DataDog/zstd v1.4.4
go: finding github.com/pkg/errors v0.8.1
go: extracting golang.org/x/text v0.3.2
go: downloading github.com/pkg/errors v0.8.1
go: extracting github.com/pkg/errors v0.8.1
go: downloading github.com/DataDog/zstd v1.4.4
go: extracting github.com/DataDog/zstd v1.4.4
[root@localhost TUGAS8]# go get -u go.mongodb.org/mongo-driver/mongo/options
go: finding go.mongodb.org/mongo-driver/mongo/options latest
go: finding go.mongodb.org/mongo-driver/mongo latest
```

Nama:	NIM:	Nilai:

```
[root@localhost TUGAS8]# go get -u tugas-docker
go: finding golang.org/x/sync latest
go: finding golang.org/x/crypto latest
go: finding golang.org/x/net latest
go: finding golang.org/x/sys latest
go: finding golang.org/x/tools latest
go: finding golang.org/x/sync v0.0.0-20190423024810-112230192c58
go: finding golang.org/x/net v0.0.0-20190620200207-3b0461eec859
go: finding golang.org/x/xerrors v0.0.0-20191011141410-1b5146add898
go: finding golang.org/x/mod v0.1.1-0.20191105210325-c90efee705ee
go: finding github.com/xdg/scram latest
go: finding golang.org/x/xerrors latest
go: finding golang.org/x/mod v0.1.0
go: downloading golang.org/x/crypto v0.0.0-20191206172530-e9b2fee46413
go: extracting golang.org/x/crypto v0.0.0-20191206172530-e9b2fee46413
```

```
[root@localhost TUGAS8]# docker build -t go-docker .
Sending build context to Docker daemon  14.34kB
Step 1/7 : FROM golang:latest
latest: Pulling from library/golang
16ea0e8c8879: Pull complete
50024b0106d5: Pull complete
ff95660c6937: Pull complete
9c7d0e5c0bc2: Pull complete
2a19d2e6789c: Pull complete
d53b5eb247b8: Pull complete
d1e7779aa3cd: Pull complete
Digest: sha256:536bd7f56e7fd590cfaf33a9e8fff7374661fbb992aece6b441b1f39c9c1c7e8
Status: Downloaded newer image for golang:latest
 ---> a1072a078890
Step 2/7 : WORKDIR /app
 ---> Running in b122cc29cdef
Removing intermediate container b122cc29cdef
 ---> 0a5f9d4bbace
Step 3/7 : COPY go.mod go.sum ./
 ---> c119ee609166
Step 4/7 : RUN go mod download
 ---> Running in 41bd63b797da
go: finding github.com/DataDog/zstd v1.4.4
go: finding github.com/go-stack/stack v1.8.0
go: finding github.com/golang/snappy v0.0.1
go: finding github.com/gorilla/mux v1.7.3
go: finding github.com/pkg/errors v0.8.1
go: finding github.com/xdg/scram v0.0.0-20180814205039-7eeb5667e42c
go: finding github.com/xdg/stringprep v1.0.0
go: finding go.mongodb.org/mongo-driver v1.2.0
go: finding golang.org/x/crypto v0.0.0-20191206172530-e9b2fee46413
go: finding golang.org/x/mod v0.1.1-0.20191105210325-c90efee705ee
go: finding golang.org/x/net v0.0.0-20191209160850-c0dbc17a3553
go: finding golang.org/x/sync v0.0.0-20190911185100-cd5d95a43a6e
go: finding golang.org/x/sys v0.0.0-20191218084908-4a24b4065292
go: finding golang.org/x/text v0.3.2
go: finding golang.org/x/tools v0.0.0-20191218040434-6f9e13bbec44
go: finding golang.org/x/xerrors v0.0.0-20191204190536-9bdfabe68543
Removing intermediate container 41bd63b797da
 ---> 0a7e58480722
Step 5/7 : COPY . .
 ---> 2da46cc65e1a
Step 6/7 : RUN go build -o main .
 ---> Running in d5ace3d7ce4f
Removing intermediate container d5ace3d7ce4f
 ---> 5fdc1ce14bf6
Step 7/7 : CMD ["./main"]
 ---> Running in 76da9bf86524
Removing intermediate container 76da9bf86524
 ---> c20dd3e88d27
Successfully built c20dd3e88d27
Successfully tagged go-docker:latest
```

Nama:	NIM:	Nilai: