

# **OS LAB**



## **HOME WORK #04**

Submitted By  
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The first output of hello1.c is:

```
pyrot@pyrot72:~/Desktop/Semester7/05 lab/lab $ gcc -o helloworld1 hello1.c
pyrot@pyrot72:~/Desktop/Semester7/05 lab/lab $ sudo docker build -t mylab .
DEPRECATED: The legacy builder is deprecated and will be removed in a future release
            Install the buildx component to build images with BuildKit:
            https://docs.docker.com/go/buildx/

Sending build context to Docker daemon 159.2kB
Step 1/5 : FROM ubuntu
--> c6b84b685f35
Step 2/5 : ADD helloworld1 home/
--> bd906071425e
Step 3/5 : ADD hello1.c home/
--> 4d98a846cd5e
Step 4/5 : RUN ls home
--> Running in e4520e7308db
hello1.c
helloworld1
^[[ARemoving intermediate container e4520e7308db
--> 8d54f24537bb
Step 5/5 : CMD ["home/helloworld1"]
--> Running in 0259d92420c3
Removing intermediate container 0259d92420c3
--> 5663c4bd5118
Successfully built 5663c4bd5118
Successfully tagged mylab:latest
pyrot@pyrot72:~/Desktop/Semester7/05 lab/lab $ sudo docker run mylab
Hello World from file hello-1.c
pyrot@pyrot72:~/Desktop/Semester7/05 lab/lab $
```

The first output of hello2.c is:

```
pyrot@pyrot72:~/Desktop/Semester7/05 lab/lab $ gcc -o helloworld1 hello2.c
pyrot@pyrot72:~/Desktop/Semester7/05 lab/lab $ sudo docker build -t mylab .
DEPRECATED: The legacy builder is deprecated and will be removed in a future release
            Install the buildx component to build images with BuildKit:
            https://docs.docker.com/go/buildx/

Sending build context to Docker daemon 279kB
Step 1/5 : FROM ubuntu
--> c6b84b685f35
Step 2/5 : ADD helloworld1 home/
--> b0627d2c8247
Step 3/5 : ADD hello1.c home/
--> 7148971d859b
Step 4/5 : RUN ls home
--> Running in fa245aea5630
hello1.c
helloworld1
Removing intermediate container fa245aea5630
--> b1c1aa9cfcef
Step 5/5 : CMD ["home/helloworld1"]
--> Running in bd05701a7ab1
Removing intermediate container bd05701a7ab1
--> 08725b89aa17
Successfully built 08725b89aa17
Successfully tagged mylab:latest
pyrot@pyrot72:~/Desktop/Semester7/05 lab/lab $ sudo docker run mylab
Hello World from file hello-2.c
pyrot@pyrot72:~/Desktop/Semester7/05 lab/lab $
```

The first output of hello3.c is:

```
pyrot@pyrot72:~/Desktop/Semester7/05 lab/lab 5$ gcc -o helloworld1 hello3.c
pyrot@pyrot72:~/Desktop/Semester7/05 lab/lab 5$ sudo docker build -t mylab .
DEPRECATED: The legacy builder is deprecated and will be removed in a future release
             Install the buildx component to build images with BuildKit:
             https://docs.docker.com/go/buildx/

Sending build context to Docker daemon  402.9kB
Step 1/5 : FROM ubuntu
--> c6b84b685f35
Step 2/5 : ADD helloworld1 home/
--> fdb1d6b5cd75
Step 3/5 : ADD hello1.c home/
--> 8eb8373d277e
Step 4/5 : RUN ls home
--> Running in 8b4598f73edb
hello1.c
helloworld1
Removing intermediate container 8b4598f73edb
--> 41bd1bca824f
Step 5/5 : CMD ["home/helloworld1"]
--> Running in de5414ab67aa
Removing intermediate container de5414ab67aa
--> 27de67446142
Successfully built 27de67446142
Successfully tagged mylab:latest
pyrot@pyrot72:~/Desktop/Semester7/05 lab/lab 5$ sudo docker run mylab
Hello World from file hello-3.c
pyrot@pyrot72:~/Desktop/Semester7/05 lab/lab 5$
```

The first output of hello4.c is:

```
pyrot@pyrot72:~/Desktop/Semester7/05 lab/lab 5$ gcc -o helloworld1 hello4.c
pyrot@pyrot72:~/Desktop/Semester7/05 lab/lab 5$ sudo docker build -t mylab .
DEPRECATED: The legacy builder is deprecated and will be removed in a future release
             Install the buildx component to build images with BuildKit:
             https://docs.docker.com/go/buildx/

Sending build context to Docker daemon  526.3kB
Step 1/5 : FROM ubuntu
--> c6b84b685f35
Step 2/5 : ADD helloworld1 home/
--> 30d5b6875c72
Step 3/5 : ADD hello1.c home/
--> a90388ea9061
Step 4/5 : RUN ls home
--> Running in 1ac74ca2781a
hello1.c
helloworld1
Removing intermediate container 1ac74ca2781a
--> 07b31944bc40
Step 5/5 : CMD ["home/helloworld1"]
--> Running in 3cc0aef8e79a
Removing intermediate container 3cc0aef8e79a
--> 556ce857c3e6
Successfully built 556ce857c3e6
Successfully tagged mylab:latest
pyrot@pyrot72:~/Desktop/Semester7/05 lab/lab 5$ sudo docker run mylab
Hello World from file hello-4.c
pyrot@pyrot72:~/Desktop/Semester7/05 lab/lab 5$
```

```
FROM ubuntu
ADD helloworld1 home/
ADD hello1.c home/
RUN ls home
CMD ["home/helloworld1"]
```

## TASK 2 :

```
# Use the official Ubuntu base image
FROM ubuntu
COPY table.sh /table.sh
RUN chmod +x /table.sh
CMD ["/table.sh"]
```

```
pyrot@pyrot72:~/Desktop/Semester7/05 lab/lab 5/table$ chmod +x shells.sh
chmod: cannot access 'shells.sh': No such file or directory
pyrot@pyrot72:~/Desktop/Semester7/05 lab/lab 5/table$ sudo chmod +x shells.sh
chmod: cannot access 'shells.sh': No such file or directory
pyrot@pyrot72:~/Desktop/Semester7/05 lab/lab 5/table$ sudo chmod +x table.sh
pyrot@pyrot72:~/Desktop/Semester7/05 lab/lab 5/table$ sudo docker build -t mylab .
DEPRECATED: The legacy builder is deprecated and will be removed in a future release
              Install the buildx component to build images with BuildKit:
              https://docs.docker.com/go/buildx/

Sending build context to Docker daemon 4.608kB
Step 1/4 : FROM ubuntu
--> c6b84b685f35
Step 2/4 : COPY table.sh /table.sh
--> a17403ea5c3b
Step 3/4 : RUN chmod +x /table.sh
--> Running in b6989c25f55b
Removing intermediate container b6989c25f55b
--> 39e2dc00a615
Step 4/4 : CMD ["/table.sh"]
--> Running in ed589cb5e92e
Removing intermediate container ed589cb5e92e
--> 418723e1fa52
Successfully built 418723e1fa52
Successfully tagged mylab:latest
pyrot@pyrot72:~/Desktop/Semester7/05 lab/lab 5/table$ sudo docker run mylab
2 x 1 = 2
2 x 2 = 4
```

```
Sending build context to Docker daemon 4.608kB
Step 1/4 : FROM ubuntu
--> c6b84b685f35
Step 2/4 : COPY table.sh /table.sh
--> a17403ea5c3b
Step 3/4 : RUN chmod +x /table.sh
--> Running in b6989c25f55b
Removing intermediate container b6989c25f55b
--> 39e2dc00a615
Step 4/4 : CMD ["/table.sh"]
--> Running in ed589cb5e92e
Removing intermediate container ed589cb5e92e
--> 418723e1fa52
Successfully built 418723e1fa52
Successfully tagged mylab:latest
pyrot@pyrot72:~/Desktop/Semester7/05 lab/lab 5/table$ sudo docker run mylab
2 x 1 = 2
2 x 2 = 4
2 x 3 = 6
2 x 4 = 8
2 x 5 = 10
2 x 6 = 12
2 x 7 = 14
2 x 8 = 16
2 x 9 = 18
2 x 10 = 20
pyrot@pyrot72:~/Desktop/Semester7/05 lab/lab 5/table$
```

```
#!/bin/bash

for i in {1..10}; do
    result=$((2 * i))
    echo "2 x $i = $result"
done
|
```