

```
1RV24MC023_CTULLAS@ctullas-VivoBook-ASUSLaptop-K3402ZA-S3402ZA:~/docker/lab/reallab$ mkdir lab2
1RV24MC023_CTULLAS@ctullas-VivoBook-ASUSLaptop-K3402ZA-S3402ZA:~/docker/lab/reallab$ cd lab2
1RV24MC023_CTULLAS@ctullas-VivoBook-ASUSLaptop-K3402ZA-S3402ZA:~/docker/lab/reallab/lab2$ nano Dockerfile
1RV24MC023_CTULLAS@ctullas-VivoBook-ASUSLaptop-K3402ZA-S3402ZA:~/docker/lab/reallab/lab2$ cat D0ckerfile
cat: D0ckerfile: No such file or directory
1RV24MC023_CTULLAS@ctullas-VivoBook-ASUSLaptop-K3402ZA-S3402ZA:~/docker/lab/reallab/lab2$ cat Dockerfile
#This is a dockerfile

#Build stage

FROM node:20-alpine AS builder

WORKDIR /app

COPY package.json package-lock.json ./

RUN npm install

COPY . .

RUN npm run build

#Production stage

FROM node:20-alpine

COPY --from=builder /app/package.json ./

COPY --from=builder /app/package-lock.json ./

COPY --from=builder /app/node_modules ./node.modules

COPY --from=builder /app/dist ./dist

EXPOSE 3000
```

```
1RV24MC023_CTULLAS@ctullas-VivoBook-ASUSLaptop-K3402ZA-S3402ZA:~/docker/lab/reallab/lab2$ cd src
1RV24MC023_CTULLAS@ctullas-VivoBook-ASUSLaptop-K3402ZA-S3402ZA:~/docker/lab/reallab/lab2/src$ nano index.js
1RV24MC023_CTULLAS@ctullas-VivoBook-ASUSLaptop-K3402ZA-S3402ZA:~/docker/lab/reallab/lab2/src$ nano index.js
1RV24MC023_CTULLAS@ctullas-VivoBook-ASUSLaptop-K3402ZA-S3402ZA:~/docker/lab/reallab/lab2/src$ cat index.js
```

```
const express=require("express");
const app=express();
const port=3000;
```

```
app.get("/",(req,res)=>res.send("hello from docker"));;
```

```
app.listen(port,()=>console.log("Running on port 3000"));
```

```
1RV24MC023_CTULLAS@ctullas-VivoBook-ASUSLaptop-K3402ZA-S3402ZA:~/docker/lab/reallab/lab2/src$ cd ..
```

```
1RV24MC023_CTULLAS@ctullas-VivoBook-ASUSLaptop-K3402ZA-S3402ZA:~/docker/lab/reallab/lab2$ npm init -y
```

```
Wrote to /home/1RV24MC023_CTULLAS/docker/lab/reallab/lab2/package.json:
```

```
{
  "name": "lab2",
  "version": "1.0.0",
  "main": "index.js",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1"
  },
  "keywords": [],
  "author": "",
  "license": "ISC",
  "description": ""
}
```

```
1RV24MC023_CTULLAS@ctullas-VivoBook-ASUSLaptop-K3402ZA-S3402ZA:~/docker/lab/reallab/lab2$ nano package.json
```

```
1RV24MC023_CTULLAS@ctullas-VivoBook-ASUSLaptop-K3402ZA-S3402ZA:~/docker/lab/reallab/lab2$ cat package.json
```

```
{
  "name": "lab2",
  "version": "1.0.0",
  "main": "index.js",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1"
  },
  "keywords": [],
  "author": "",
  "license": "ISC",
  "description": ""
}
```



```
1RV24MC023_CTULLAS@ctullas-VivoBook-ASUSLaptop-K3402ZA-S3402ZA: ~/docker/lab
1RV24MC023_CTULLAS@ctullas-VivoBook-ASUSLaptop-K3402ZA-S3402ZA:~/docker/lab/reallab/lab2$ cd src
1RV24MC023_CTULLAS@ctullas-VivoBook-ASUSLaptop-K3402ZA-S3402ZA:~/docker/lab/reallab/lab2/src$ nano index.js
1RV24MC023_CTULLAS@ctullas-VivoBook-ASUSLaptop-K3402ZA-S3402ZA:~/docker/lab/reallab/lab2/src$ cd ..
1RV24MC023_CTULLAS@ctullas-VivoBook-ASUSLaptop-K3402ZA-S3402ZA:~/docker/lab/reallab/lab2$ docker build -t expressimage2 .
[+] Building 2.6s (15/15) FINISHED
=> [internal] load build definition from Dockerfile
=> => transferring dockerfile: 471B
=> [internal] load metadata for docker.io/library/node:20-alpine
=> [internal] load .dockerignore
=> => transferring context: 2B
=> [internal] load build context
=> => transferring context: 41.68kB
=> [builder 1/6] FROM docker.io/library/node:20-alpine@sha256:6178e78b972f79c335df281f4b7674a2d85071aae2af020ffa39f0a770265435
=> CACHED [builder 2/6] WORKDIR /app
=> CACHED [builder 3/6] COPY package.json package-lock.json ./
=> CACHED [builder 4/6] RUN npm install
=> [builder 5/6] COPY . .
=> [builder 6/6] RUN npm run build
=> CACHED [stage-1 2/5] COPY --from=builder /app/package.json ./
=> CACHED [stage-1 3/5] COPY --from=builder /app/package-lock.json ./
=> CACHED [stage-1 4/5] COPY --from=builder /app/node_modules ./node_modules
=> [stage-1 5/5] COPY --from=builder /app/dist ./dist
=> exporting to image
=> => exporting layers
=> => writing image sha256:14aefc1858c19ff57b644e876c7662d90200438f6a043851f65ac9ebda90c182
=> => naming to docker.io/library/expressimage2
1RV24MC023_CTULLAS@ctullas-VivoBook-ASUSLaptop-K3402ZA-S3402ZA:~/docker/lab/reallab/lab2$ docker run -d -p 3000:3000 --name expresscontainer3 expressimage2
e54b08258213f8a76396a41d45ad694a9e4ffcee83dcee4f4f2619b8dfdc66a2
1RV24MC023_CTULLAS@ctullas-VivoBook-ASUSLaptop-K3402ZA-S3402ZA:~/docker/lab/reallab/lab2$ docker ps
CONTAINER ID   IMAGE                COMMAND                  CREATED        STATUS        PORTS                               NAMES
e54b08258213   expressimage2        "docker-entrypoint.s..." 4 seconds ago  Up 3 seconds  0.0.0.0:3000->3000/tcp, [::]:3000->3000/tcp  expresscontainer3
1RV24MC023_CTULLAS@ctullas-VivoBook-ASUSLaptop-K3402ZA-S3402ZA:~/docker/lab/reallab/lab2$ cd ..
```

