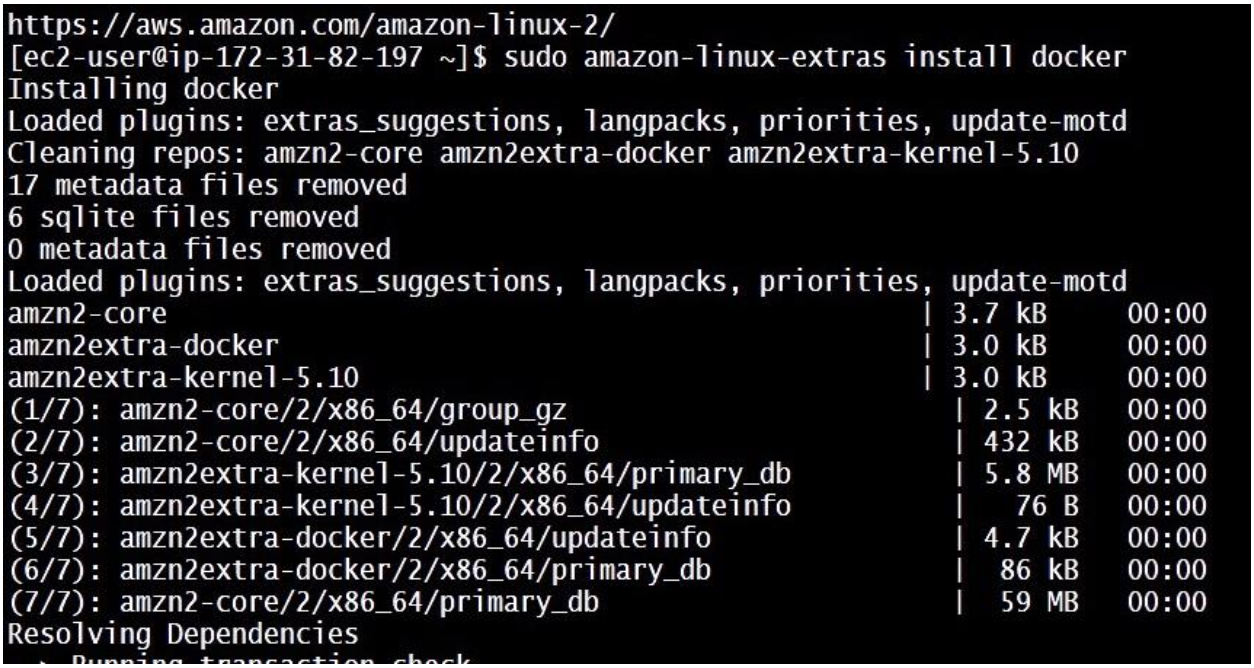
Commands used for deploying the flask application on the ec2 instance

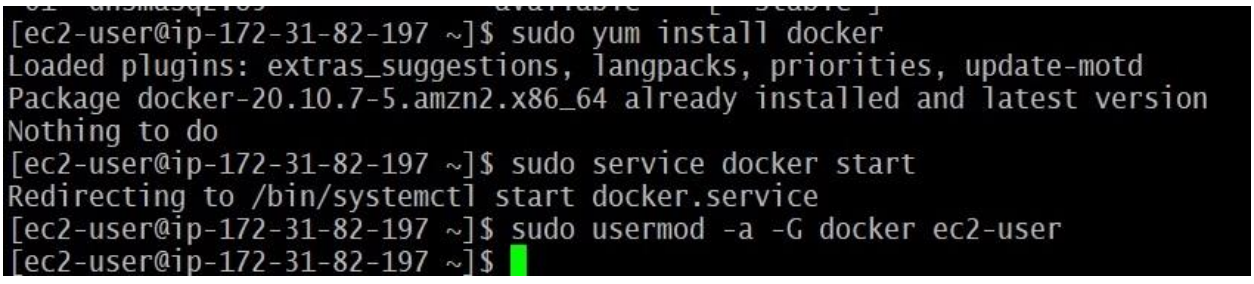
The following screenshots show the codes ran in ec2 instance for installing the docker and building a container and deploying the app in the container

Age Prediction

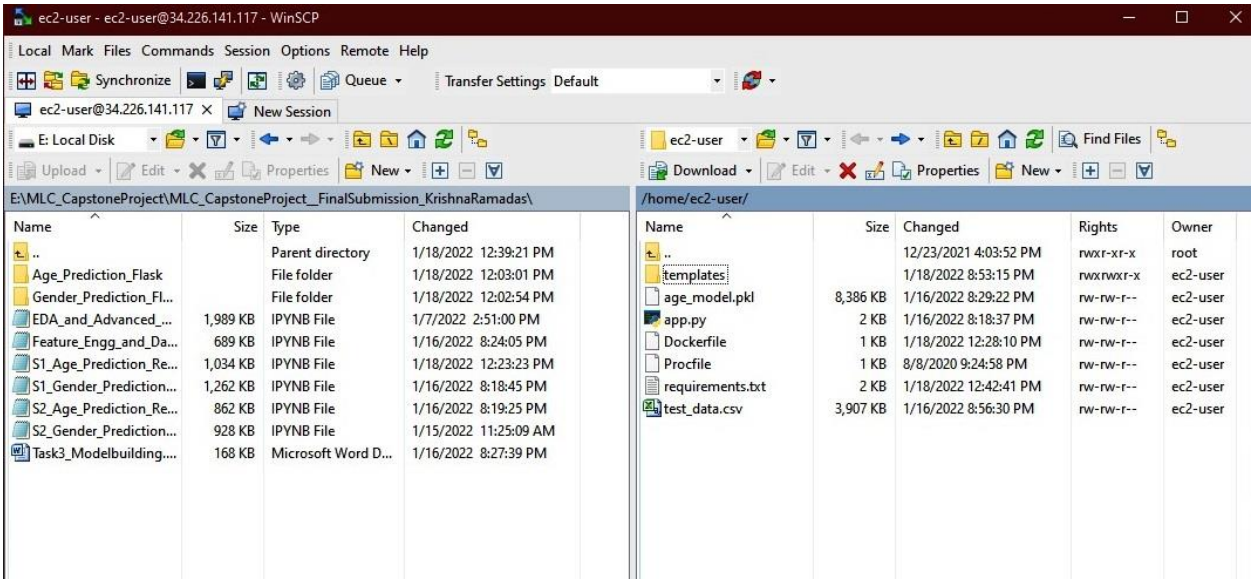
1. **Installing docker**



2. **Starting docker service and giving permission to ec2-user**



3. **Transferring files from local to ec2-user using WINSCp**

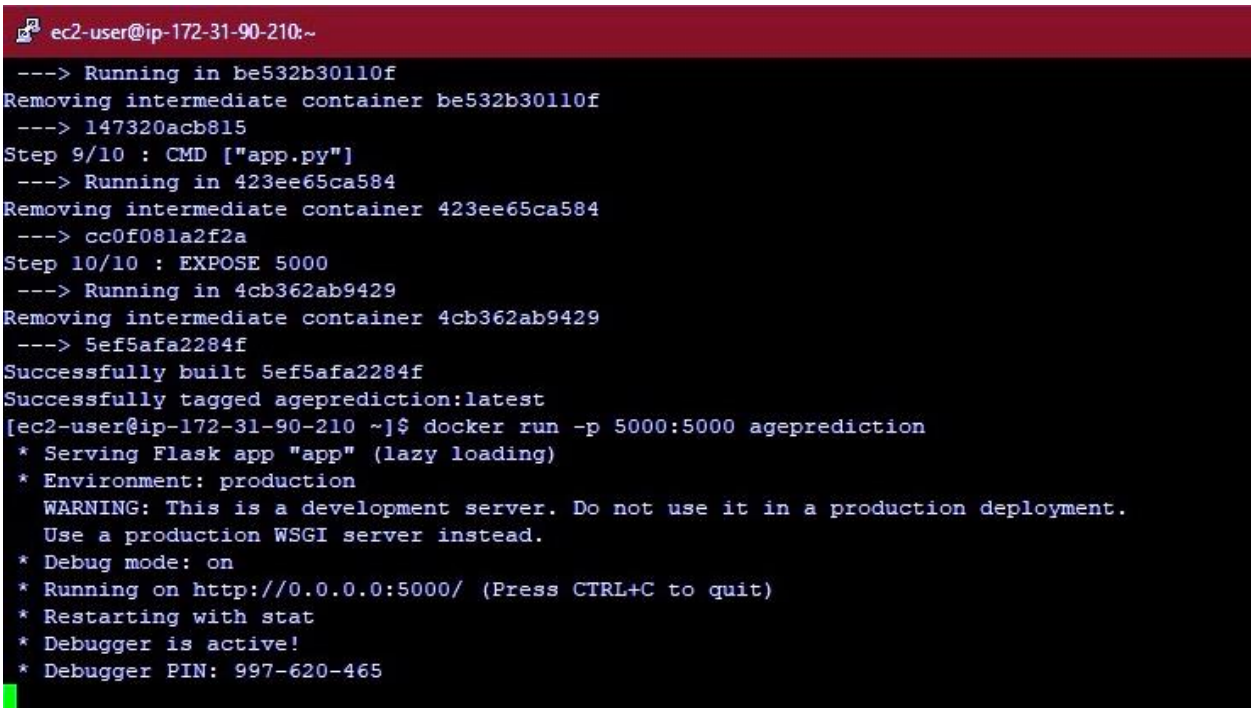


4. **Buildong docker image**

   First this code is run

```
sudo chmod 666 /var/run/docker.sock
```

5. **Running app**



Gender Prediction

Up until step 4 is repeated for gender prediction app deployment then the following is done:

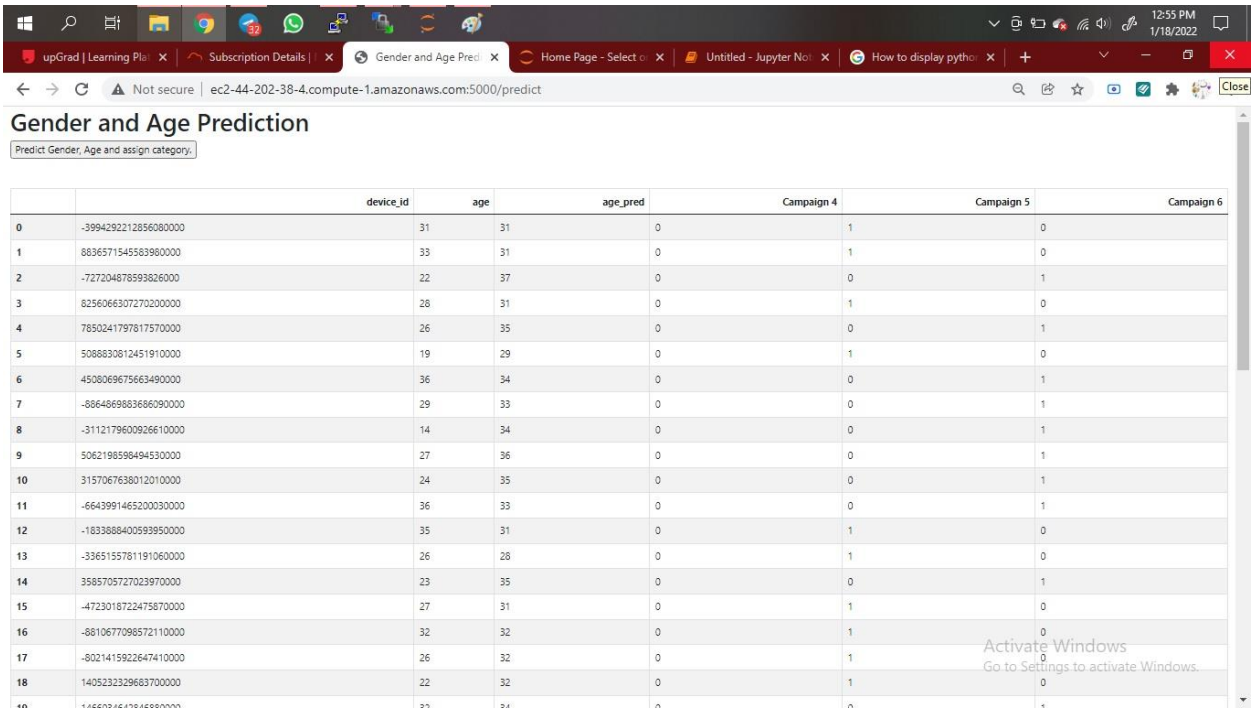
Gender prediction image build

Deploying the app

```
Step 10/10 : EXPOSE 5000
 ---> Running in dflaaf108ad7
Removing intermediate container dflaaf108ad7
 ---> c55ad188b0de
Successfully built c55ad188b0de
Successfully tagged genderprediction:latest
[ec2-user@ip-172-31-90-210 ~]$ docker run -p 5000:5000 genderprediction
 * Serving Flask app "app" (lazy loading)
 * Environment: production
   WARNING: This is a development server. Do not use it in a production deployme
nt.
   Use a production WSGI server instead.
 * Debug mode: on
 * Running on http://0.0.0.0:5000/ (Press CTRL+C to quit)
 * Restarting with stat
 * Debugger is active!
 * Debugger PIN: 557-081-484
117.194.169.41 - - [19/Jan/2022 05:25:46] "POST /predict HTTP/1.1" 200 -
117.194.169.41 - - [19/Jan/2022 05:26:05] "POST /predict HTTP/1.1" 200 -
```

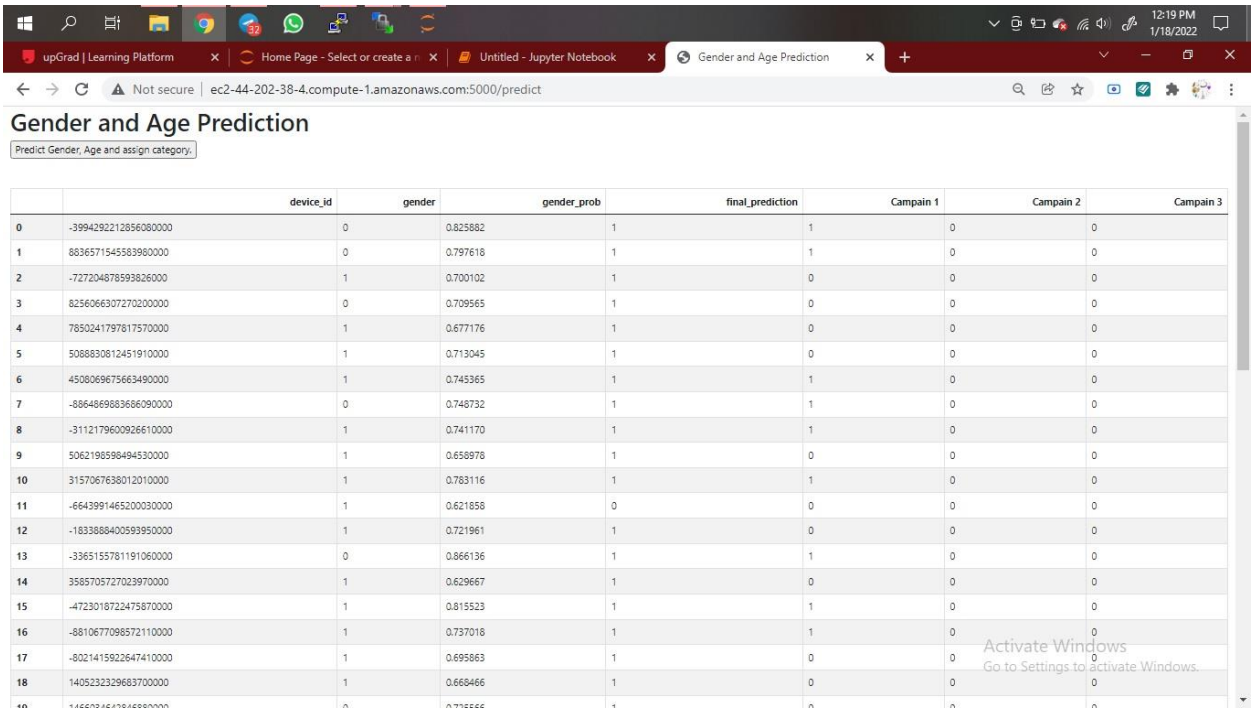
The screenshot of the final output for predicting the campaigns for the 50 customers

Age Prediction



	device_id	age	age_pred	Campaign 4	Campaign 5	Campaign 6
0	-3994292212856080000	31	31	0	1	0
1	8836571545583980000	33	31	0	1	0
2	-727204878593826000	22	37	0	0	1
3	8256066307270200000	28	31	0	1	0
4	7850241797817570000	26	35	0	0	1
5	5088830812451910000	19	29	0	1	0
6	4508069675663490000	36	34	0	0	1
7	-8864869883686090000	29	33	0	0	1
8	-3112179600926610000	14	34	0	0	1
9	5062198598494530000	27	36	0	0	1
10	3157067638012010000	24	35	0	0	1
11	-6643991465200030000	36	33	0	0	1
12	-1833888400593950000	35	31	0	1	0
13	-3365155781191060000	26	28	0	1	0
14	3585705727023970000	23	35	0	0	1
15	-4723018722475870000	27	31	0	1	0
16	-8810677098572110000	32	32	0	1	0
17	-8021415922647410000	26	32	0	1	0
18	1405232329683700000	22	32	0	1	0

Gender Prediction



	device_id	gender	gender_prob	final_prediction	Campain 1	Campain 2	Campain 3
0	-3994292212856080000	0	0.825882	1	1	0	0
1	8836571545583980000	0	0.797618	1	1	0	0
2	-727204878593826000	1	0.700102	1	0	0	0
3	8256066307270200000	0	0.709565	1	0	0	0
4	7850241797817570000	1	0.677176	1	0	0	0
5	5088830812451910000	1	0.713045	1	0	0	0
6	4508069675663490000	1	0.745365	1	1	0	0
7	-8864869883686090000	0	0.748732	1	1	0	0
8	-3112179600926610000	1	0.741170	1	1	0	0
9	5062198598494530000	1	0.658978	1	0	0	0
10	3157067638012010000	1	0.783116	1	1	0	0
11	-6643991465200030000	1	0.621858	0	0	0	0
12	-1833888400593950000	1	0.721961	1	0	0	0
13	-3365155781191060000	0	0.866136	1	1	0	0
14	3585705727023970000	1	0.629667	1	0	0	0
15	-4723018722475870000	1	0.815523	1	1	0	0
16	-8810677098572110000	1	0.737018	1	1	0	0
17	-8021415922647410000	1	0.695863	1	0	0	0
18	1405232329683700000	1	0.668466	1	0	0	0