HOME TASK

EXPERIMENT – 3

STUDENT'S NAME : YANA SRIVASTAVA

STUDENT'S UID: 20BCS2279

SECTION : 23B

SEMESTER: 1st

Aim:

At a newly opened super-market, the Manager wants to have a quick survey of the customer satisfaction without interacting with all the customers. Develop an algorithm/ code/ system that takes the images of various customers entering/ exiting the super-market as input, and find out the number of males/ females who are happy and sad.

Requirements:

PC with internet connectivity, Python 3.7

The images can be downloaded from _____.

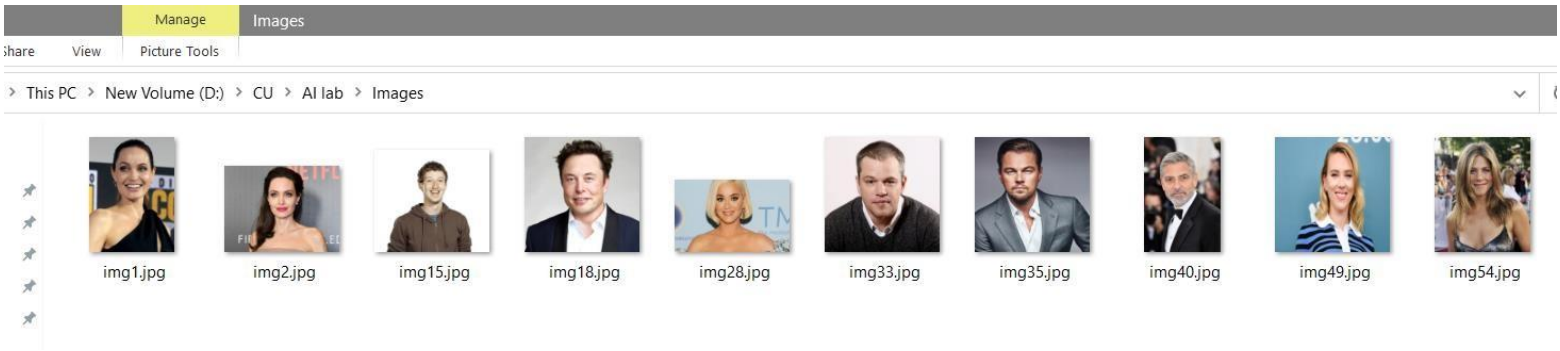
CODE:

```
from deepface import DeepFace

from PIL import Image import

cv2

import matplotlib.pyplot as plt

import glob import os total=0

m=0

f=0 happy=0

sad=0

img_dir = r"D:\CU\AI lab\Images" # Enter Directory of all images

data_path = os.path.join(img_dir,'*.jpg')  files =

glob.glob(data_path)

data = []  for

f1 in files:
```

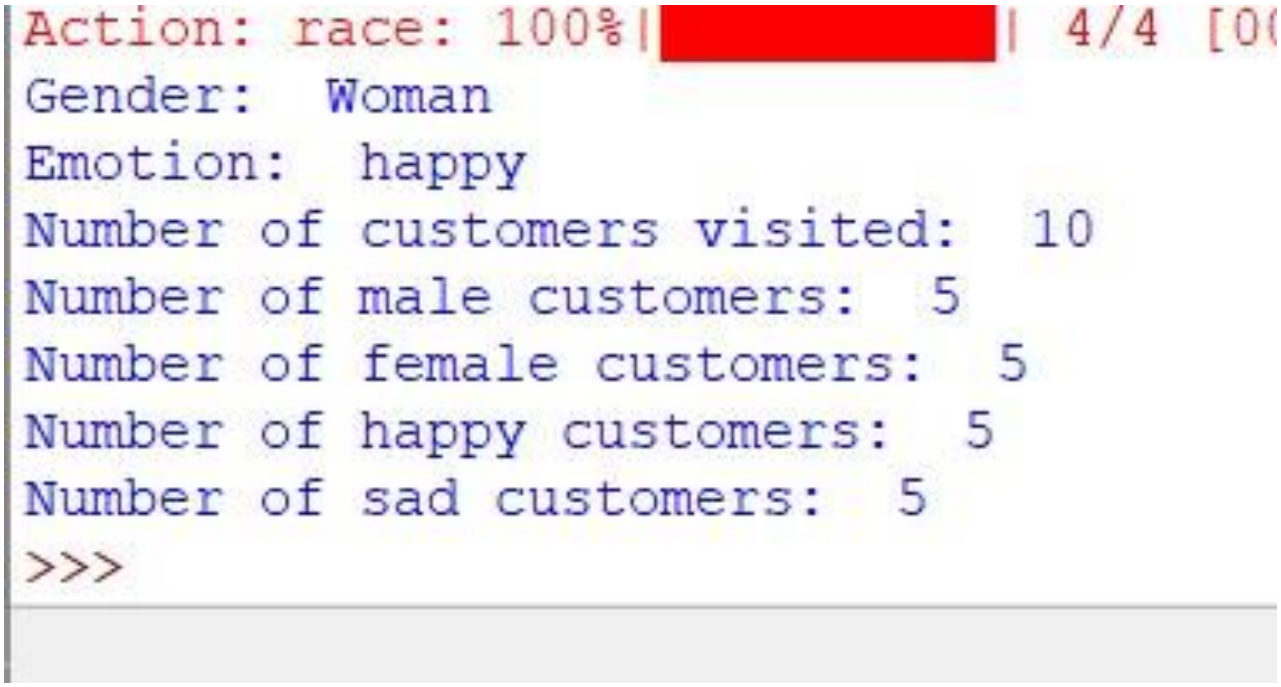
```
    img = cv2.imread(f1)     plt.imshow(img[:, :, ::-1])
image = Image.open(f1)     image.show()
data.append(img)     demography =
DeepFace.analyze(img)     print("Gender: ",
demography["gender"])     print("Emotion: ",
demography["dominant_emotion"])     total=total+1     if
demography["dominant_emotion"]=="happy":
        happy=happy+1
else:
        sad=sad+1     if
demography["gender"]=="Man":
        m=m+1
else:
f=f+1
print("Number of customers visited: ",total)
print("Number of male customers: ",m) print("Number
of female customers: ",f) print("Number of happy
customers: ",i) print("Number of sad customers: ",j)
```

OUTCOME:

For customers :



Output :



Expected Outcome:

The output of the code should calculate the following:

Number of customers visited: _____10____

Number of male customers: _____5____

Number of female customers: _____5_____

Number of happy customers: _____5_____

Number of sad customers: _____5_____