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#!/usr/bin/env python
# coding: utf-8

# In[16]:


import pandas as pd
import
os
os.chdir("C:/Users/SATHWIK/Desktop/ML DL Assignment 1")#input the directory of
data set.
data=pd.read_csv('internet_session.csv')


# In[17]:


data.tail(20)


#
In[14]:


ip=data.iloc[:,3]
ip.describe()
k=0
for i in range(1,len(ip)):

if(ip[i]!=ip[i-1]):
    k=k+1
#print(k)
print('The IP changed',k,'times')


#
In[13]:


d=data.iloc[:,4]
l=0
for j in range(1,len(d)):
   if(d[j]!=d[j-1]):

l=l+1
#print(l)
print('The device changed',l,'times')


#
In[5]:


ut=data.iloc[:,2]
ut.head()
ut1=[]
sec=0
for m in range(0,len(d)):

ut1.append(str(ut[m]))

ut1[m]=int(ut1[m][3]+ut1[m][4])*3600+int(ut1[m][6]+ut1[m][7])*60+int(ut1[m][9]+ut1[m][10])*1

 sec=sec+ut1[m]
ut1=[]
sec=0
for m in range(0,len(d)):
    ut1.append(str(ut[m]))

ut1[m]=int(ut1[m][3]+ut1[m][4])*3600+int(ut1[m][6]+ut1[m][7])*60+int(ut1[m][9]+ut1[m][10])*1

 sec=sec+ut1[m]
```

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# In[6]:


print(sec/(24*3600*9))


#
In[7]:


st=data.iloc[:,1]
user=data.iloc[:,0]
ut.head()
st1=[]
st2=[]
st1.append(str(st[0]))
f
or n in range(0,len(st)):
    st1.append(str(st[n]))
    st2.append(str(user[n]))

st1[n]=(st1[n][8]+st1[n][9]+'/'+st1[n][5]+st1[n][6]+'-'+st2[n][4])


# In[8]:


#print(st1)


#
In[11]:


#print(st2)#print(day,month)
day=0
month=0
for n in range(1,len(st1)):

if(st1[n]!=st1[n-1]):
       day=day+1

if((st1[n][4]!=st1[n-1][4])(st1[n][7]!=st1[n-1][7])):
       month=month+1


# In[
]:


print(day,month)


# In[ ]:


df.describe()


# In[ ]:


df.head()


# In[ ]:
```