Follow the instructions and headings below to complete your assignment

Importing The Dataset

Import your 'applestore' dataset with its header and data in different variables

```
from csv import reader

dataset = list(reader(open('AppleStore.csv', encoding = 'utf-8')))

header = dataset[0]
data = dataset[1:]
```

The dataset provides information related to the apps available on the apple store with its price, reviews, ratings, etc.

id	track_nam	size_bytes	currency	price	rating_count_tot	rating_count_ver	user_ratin	user_ratin	ver	cont_ratir	prime_ge	sup_devic	ipadSc_ur	lang.num	vpp_lic
284882215	Facebook	389879808	USD	0	2974676	212	3.5	3.5	95	4+	Social Net	37	1	29	1
389801252	Instagram	113954816	USD	0	2161558	1289	4.5	4	10.23	12+	Photo & V	37	0	29	1
529479190	Clash of C	116476928	USD	0	2130805	579	4.5	4.5	9.24.12	9+	Games	38	5	18	1
420009108	Temple Ru	65921024	USD	0	1724546	3842	4.5	4	1.6.2	9+	Games	40	5	1	1
284035177	Pandora -	130242560	USD	0	1126879	3594	4	4.5	8.4.1	12+	Music	37	4	1	1
429047995	Pinterest	74778624	USD	0	1061624	1814	4.5	4	6.26	12+	Social Net	37	5	27	1
282935706	Bible	92774400	USD	0	985920	5320	4.5	5	7.5.1	4+	Reference	37	5	45	1
553834731	Candy Cru	222846976	USD	0	961794	2453	4.5	4.5	1.101.0	4+	Games	43	5	24	1
324684580	Spotify M	132510720	USD	0	878563	8253	4.5	4.5	8.4.3	12+	Music	37	5	18	1
343200656	Angry Bird	175966208	USD	0	824451	107	4.5	3	7.4.0	4+	Games	38	0	10	1
512939461	Subway Su	156038144	USD	0	706110	97	4.5	4	1.72.1	9+	Games	38	5	1	1
362949845	Fruit Ninja	104590336	USD	1.99	698516	132	4.5	4	2.3.9	4+	Games	38	5	13	1
359917414	Solitaire	101943296	USD	0	679055	9673	4.5	4.5	4.11.2	4+	Games	38	4	11	1
469369175	CSR Racing	524803072	USD	0	677247	2029	4.5	4.5	4.0.1	4+	Games	37	5	10	1
924373886	Crossy Ro	165471232	USD	0	669079	1087	4.5	4.5	1.5.4	9+	Games	38	5	13	1
575658129	Injustice:	1829599232	USD	0	612532	410	4.5	4.5	2.15.1	12+	Games	39	5	13	1
506627515	Hay Day	113641472	USD	0	567344	4887	4.5	4.5	1.33.134	4+	Games	38	5	18	1
500116670	Clear Visio	37879808	USD	0.99	541693	69225	4.5	4.5	1.1.3	17+	Games	43	5	1	1
479516143	Minecraft	147787776	USD	6.99	522012	1148	4.5	4.5	1.1	9+	Games	37	1	11	1
293778748	PAC-MAN	100849664	USD	0	508808	99	3	4.5	6.3.5	4+	Games	38	5	10	1
341232718	Calorie Co	152700928	USD	0	507706	181	4.5	4.5	7.16	4+	Health & F	37	5	19	1
440045374	DragonVa	153074688	USD	0	503230	282	4.5	4.5	3.15.0	4+	Games	37	5	10	1

Task 1 - Calculating Average User Rating

For the whole dataset including all of its apps, calculate their average user rating

```
header.index('user_rating')

7

avg_user_rating = []
for i in data:
    avg_user_rating.append(float(i[7]))
    avg = sum(avg_user_rating)/len(avg_user_rating)
print(avg)

3.526955675976101
```

Task 2 - Calculate Average User Rating For Free Music

Use the relative columns to calculate the average user rating this time for the apps within the 'Music' category and are 'Free'

```python
header.index('user_rating')
```

7

```python
header.index('prime_genre')
```

11

```python
header.index('price')
```

4

```python
avg_user_rating1 = []
for i in data:
    if float(i[4]) == 0 and i[11] == 'Music':
        avg_user_rating1.append(float(i[7]))
        avg = sum(avg_user_rating1)/len(avg_user_rating1)

print(avg)
```

3.9402985074626864

Task 3 - Calculate Average User Rating For Paid Music Or Paid Games

Use the relative columns to calculate the average user rating for apps which are paid and are either in the 'Music' or the 'Games' category

```python
avg_user_rating2 = []
for i in data:
    if float(i[4]) != 0 and (i[11] == 'Music' or i[11] == 'Games'):
        avg_user_rating2.append(float(i[7]))
        avg = sum(avg_user_rating2)/len(avg_user_rating2)

print(avg)
```

3.9096062052505967

Task 4 - Creating Price Category Using Conditional Statements

Use the conditions below to create a new column named 'category' which specifies the type of product in relation to its price

Example: All Applications with price greater than 20 and less than and equal to 50 should have Affordable in their category column

```python
header.append('Category')
```

```
header

['id',
 'track_name',
 'size_bytes',
 'currency',
 'price',
 'rating_count_tot',
 'rating_count_ver',
 'user_rating',
 'user_rating_ver',
 'ver',
 'cont_rating',
 'prime_genre',
 'sup_devices.num',
 'ipadSc_urls.num',
 'lang.num',
 'vpp_lic',
 'Category']

for i in data:
    price = float(i[4])
    if price == 0:
        i.append('free')
    elif price > 0 and price <= 20:
        i.append('cheap')
    elif price > 20 and price <= 50:
        i.append('affordable')
    elif price > 50:
        i.append('expensive')
    else:
        i.append('price not given')
```

Run The Commands Below To Save Your File After Completing All The Tasks

```
import pandas as pd

pd.DataFrame(dataset).to_csv('AppleStore_updated.csv',header=False,index=False)
```

Instructions To Submit Your Assignment

- Complete this file and submit it in google classroom along with your 'AppleStore_updated.csv' file
- Make Sure To Submit the Notebook Version (.ipynb) not the pdf version
- Make Sure Your Code is Running and Free From Errors
- Make Sure to complete and practise the assignment by your self without any help for your practise and skills