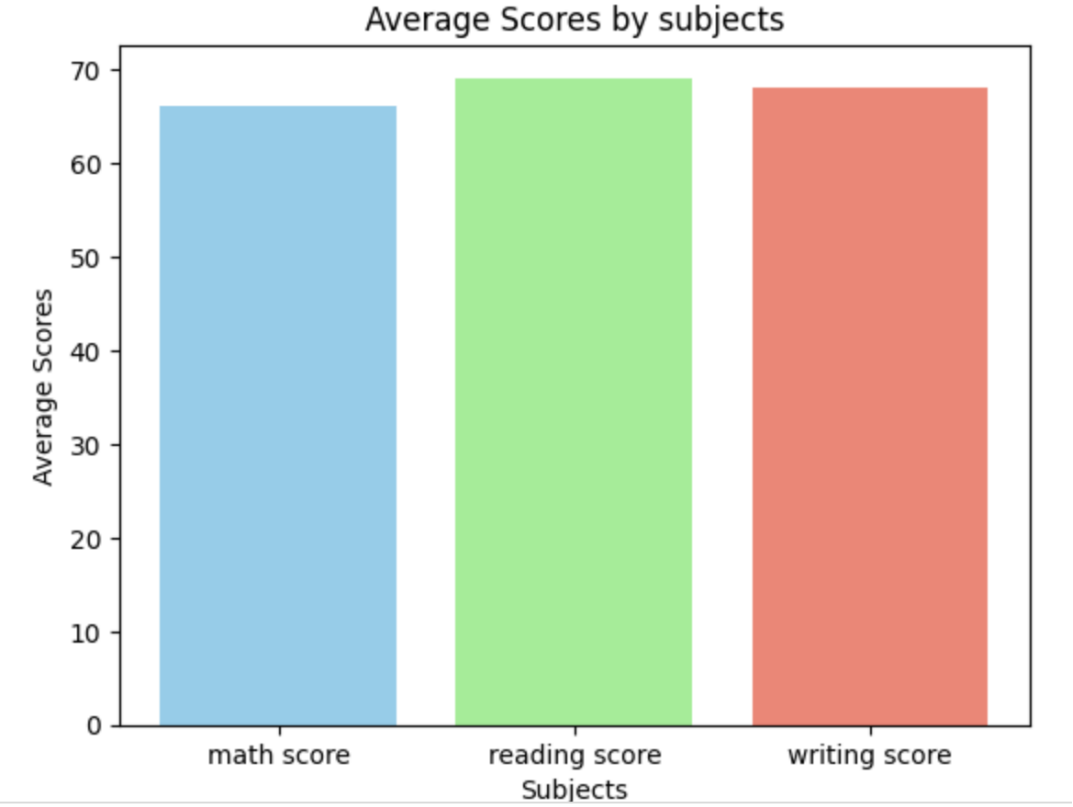
1)
```
import pandas as pd
import matplotlib.pyplot as plt
df=pd.read_csv('StudentsPerformance.csv')
print(df.head())
subjects=["math score","reading score","writing score"]
means=[df[s].mean() for s in subjects]
plt.bar(subjects,means,color=["skyblue","lightgreen","salmon"])
plt.title("Average Scores by subjects")
plt.xlabel("Subjects")
plt.ylabel("Average Scores")
plt.show()
```

OUTPUT:

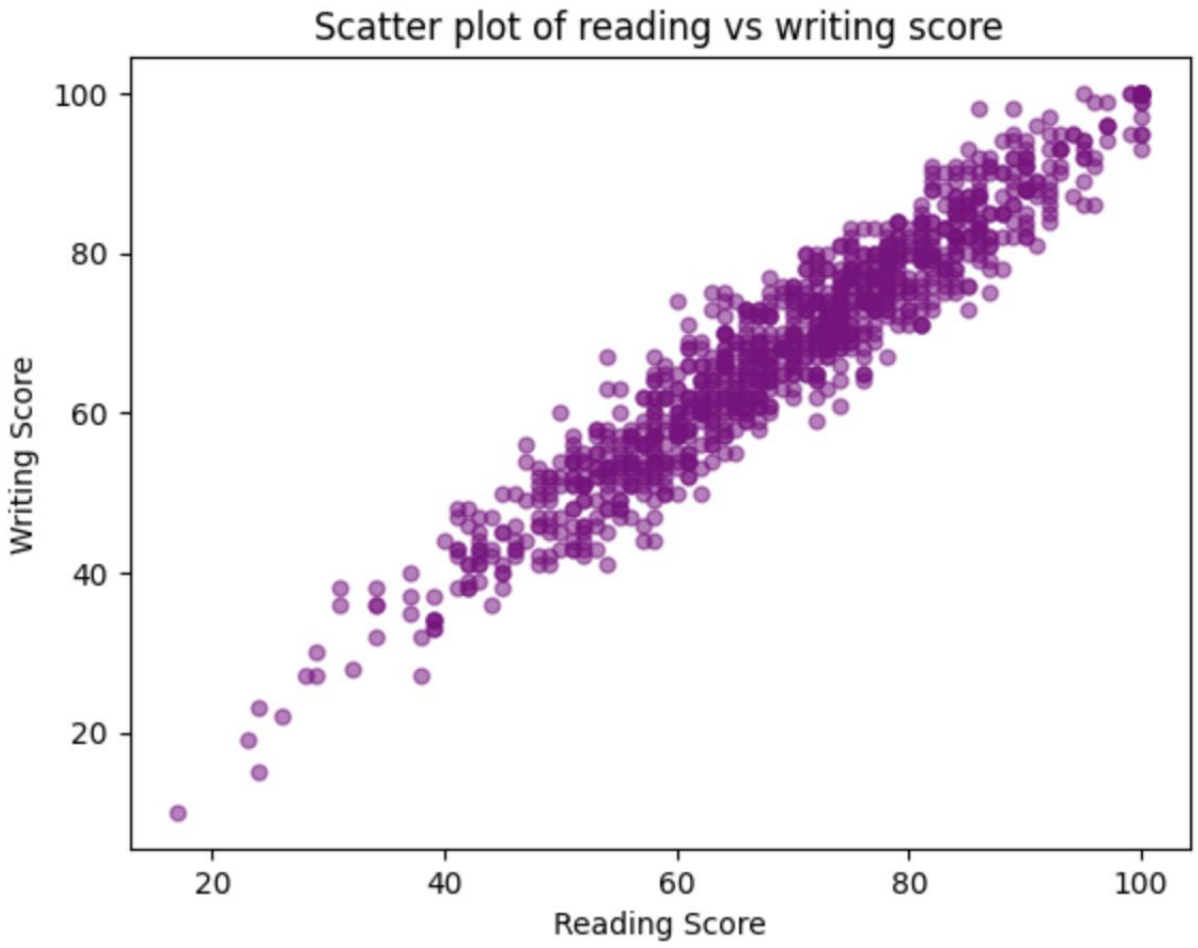
```
   gender race/ethnicity parental level of education         lunch  \
0  female        group B           bachelor's degree      standard
1  female        group C                some college      standard
2  female        group B             master's degree      standard
3    male        group A          associate's degree  free/reduced
4    male        group C                some college      standard

  test preparation course  math score  reading score  writing score
0                    none          72             72             74
1               completed          69             90             88
2                    none          90             95             93
3                    none          47             57             44
4                    none          76             78             75
```




```
2) import pandas as pd
import matplotlib.pyplot as plt
df=pd.read_csv('StudentsPerformance.csv')
print(df.head())
subjects=["math score","reading score","writing score"]
```

```
plt.scatter(df["reading score"],df["writing
score"],color="purple",alpha=0.5,s=25)
plt.title("Scatter plot of reading vs writing score")
plt.xlabel("Reading Score")
plt.ylabel("Writing Score")
plt.show()
```

OUTPUT:




```
3) import pandas as pd
import matplotlib.pyplot as plt
df=pd.read_csv('StudentsPerformance.csv')
print(df.head())
```

```
edu_counts=df["parental level of education"].value_counts()
plt.pie(edu_counts,labels=edu_counts.index,autopct="%1.1f%%",startangle=90,colors=plt.cm.Paired(np.linspace(0,1,len(edu_counts))))
plt.title("Parental level of distribution")
plt.show()
```

OUTPUT: