Introduction to AI Programming

Python Introduction, Installation

COURSE TITLE

Introduction to AI Programming

Assignment No:1

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1. Load the CSV manually using the csv module (not pandas).
2. Store the consumption column in a list of floats.
   Compute:
   2.1 Total consumption
   2.2 Average consumption
   2.3 Maximum and minimum
3. Use a list comprehension to convert hourly consumption into kWh.
4. Print all results in a clean format.

In [ ]:
```
import csv    #1.importing csv module
consumption=[]
with open(r"D:\3rd semester\introduction to AI\Assignments and OEL\Assignment 1
 reader=csv.reader(file)
 for index,r in enumerate(reader):
  if index==0:
    continue
  consumption.append(float(r[1]))   #2.storing consumption column in list
```

In [ ]:
```
total_consumption=sum(consumption)  #2.1 calculating total consumption

avg=total_consumption/len(consumption)  #2.2 calculating average consumption
```

In [ ]:
```
mx=max(consumption)  #2.3 maximum
mn=min(consumption) #2.3 minimum
```

In [ ]:
```
kwh=[x/1000 for x in consumption]   #3.converting hourly consumption in Kwh by
```

In [ ]:
```
#4.printing all results
print("consumption column in list of float ->",consumption)
print("Total consumption in given column: ",total_consumption)
print("average consumption: ",avg)
print("maximum power consumed: ",mx)
print("minimum power consumed",mn)
print("list of consumption column in KWh ->",kwh)
```

```
consumption column in list of float -> [200.0, 300.0, 500.0, 700.0, 600.0, 400.
0, 800.0, 700.0, 600.0, 500.0]
Total consumption in given column:  5300.0
average consumption:  530.0
maximum power consumed:  800.0
minimum power consumed 200.0
list of consumption column in KWh -> [0.2, 0.3, 0.5, 0.7, 0.6, 0.4, 0.8, 0.7,
0.6, 0.5]
```

In [ ]: