10/3/23, 1:25 PM parcels

```
import pandas as pd
In [1]:
          class Parcel:
In [18]:
              parcels by category = {}
              def __init__(self, parcel_number, parcel_weight, parcel category):
                  self.parcel number = parcel number
                  self.parcel weight = parcel weight
                  self.parcel category = parcel category
                  if parcel category in self.parcels by category:
                       self.parcels by category[parcel category].append(parcel number)
                  else:
                       self.parcels by category[parcel category] = [parcel number]
              def __str__(self):
                  return f"Parcel Number: {self.parcel number}, Category: {self.parcel category}"
          parcel1 = Parcel(23456, 10, "filters")
          parcel2 = Parcel(66234, 15, "automobile parts")
          parcel3 = Parcel(98432, 30, "Cargo container")
          parcel4 = Parcel(96355, 20, "filters")
          parcel5 = Parcel(53463, 40, "Cargo_container")
          parcel6 = Parcel(86643, 35, "automobile_parts")
          parcel7 = Parcel(64326, 25, "automobile parts")
          parcel8 = Parcel(87653, 5, "Cargo_container")
          parcel9 = Parcel(83722, 50, "filters")
          print(Parcel.parcels_by_category)
         {'filters': [23456, 96355, 83722], 'automobile_parts': [66234, 86643, 64326], 'Cargo_con
         tainer': [98432, 53463, 87653]}
          df = pd.DataFrame.from_dict(Parcel.parcels_by_category, orient='index').transpose()
In [25]:
          df=df.fillna(0)
          df
            filters automobile parts Cargo container
Out[25]:
         0 23456
                            66234
                                           98432
         1 96355
                            86643
                                           53463
         2 83722
                            64326
                                           87653
          parcel csv = df.to csv('parcel.csv', index = True)
In [20]:
In [ ]:
```