Write a Python program that:

1. Reads a text file containing a list of product IDs signifying product sales transactions.
2. Uses that data to generate a CSV file containing the following data points associated with each transaction:
   1. A sequential IDindicating the order of the individual transaction within the file.
   2. The date on which the file was generated.
   3. The product ID
   4. The product name
   5. The product unit price

The output of the program should look something like the following:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| current\_date | sale\_id | product\_id | name | price |
| 5/9/2023 | 1 | P005 | Mobile Phone Case | 15 |
| 5/9/2023 | 2 | P001 | Wireless Headphones | 100 |
| 5/9/2023 | 3 | P001 | Wireless Headphones | 100 |
| 5/9/2023 | 4 | P006 | Wireless Mouse | 30 |
| 5/9/2023 | 5 | P006 | Wireless Mouse | 30 |
| 5/9/2023 | 6 | P003 | Bluetooth Speaker | 50 |
| 5/9/2023 | 7 | P004 | USB Flash Drive | 20 |

* The raw product sales transactions can be found in the “product\_sales.txt” file in the course resources.
* To help you get started, here’s a mapping between the product IDs in product\_sales.txt and their respective names and prices:

|  |  |  |
| --- | --- | --- |
| Product ID | Product Name | Unit Price |
| P001 | Wireless Headphones | 100 |
| P002 | Laptop Backpack | 60 |
| P003 | Bluetooth Speaker | 50 |
| P004 | USB Flash Drive | 20 |
| P005 | Mobile Phone Case | 15 |
| P006 | Wireless Mouse | 30 |
| P007 | Laptop Stand | 40 |
| P008 | HDMI Cable | 15 |
| P009 | Smartphone | 600 |
| P010 | External Hard Drive | 100 |

* Use **datetime.date.today()** to fetch the current date with Python (after importing the datetime module of course).

And of course, good luck!