

DESCRIPTION

Table: Products

+-----+-----+		
Column Name	Type	
+-----+-----+		
product_id	int	
low_fats	enum	
recyclable	enum	
+-----+-----+		

product_id is the primary key (column with unique values) for this table.

low_fats is an ENUM (category) of type ('Y', 'N') where 'Y' means this product is low fat and 'N' means it is not.

recyclable is an ENUM (category) of types ('Y', 'N') where 'Y' means this product is recyclable and 'N' means it is not.

Write a solution to find the ids of products that are both low fat and recyclable.

Return the result table in **any order**.

The result format is in the following example.

Example 1:

Input:

Products table:

+-----+-----+-----+			
product_id	low_fats		recyclable
+-----+-----+-----+			
0	Y	N	
1	Y	Y	
2	N	Y	
3	Y	Y	

```
| 4      | N      | N      |
+-----+-----+-----+
```

Output:

```
+-----+
| product_id |
+-----+
| 1          |
| 3          |
+-----+
```

Explanation: Only products 1 and 3 are both low fat and recyclable.

SOLUTION in Pandas

Option 1:

```
import pandas as pd

def find_products(products: pd.DataFrame) -> pd.DataFrame:
    return products.loc[(products['low_fats'] == 'Y') & (products['recyclable'] == 'Y'), ['product_id']]
```

Option 2:

```
def find_products(products: pd.DataFrame) -> pd.DataFrame:
    return pd.DataFrame(products['product_id'].loc[(products['low_fats'] == 'Y') & (products['recyclable'] == 'Y')])
```

Option 3:

```
def find_products(products: pd.DataFrame) -> pd.DataFrame:
    df = products[(products['low_fats'] == 'Y') & (products['recyclable'] == 'Y')]
    return df[['product_id']]
```