In [ ]:
```
import numpy as np
```

In [ ]:
```
import pandas as pd
df = pd.read_csv('database.csv', delimiter=';')
print(df.head())
```

```
   ID  Duration          Date  Pulse  Maxpulse Calories
0   0        60  '2020/12/01'    110       130     4091
1   1        60  '2020/12/02'    117       145     4790
2   2        60  '2020/12/03'    103       135     3400
3   3        45  '2020/12/04'    109       175     2824
4   4        45  '2020/12/05'    117       148     4060
```

In [ ]:
```
print(df.head(10))
```

```
   ID  Duration          Date  Pulse  Maxpulse Calories
0   0        60  '2020/12/01'    110       130     4091
1   1        60  '2020/12/02'    117       145     4790
2   2        60  '2020/12/03'    103       135     3400
3   3        45  '2020/12/04'    109       175     2824
4   4        45  '2020/12/05'    117       148     4060
5   5        60  '2020/12/06'    102       127     3000
6   6        60  '2020/12/07'    110       136     3740
7   7       450  '2020/12/08'    104       134     2533
8   8        30  '2020/12/09'    109       133     1951
9   9        60  '2020/12/10'     98       124     2690
```

In [ ]:
```
print(df.tail(10))
```

```
    ID  Duration          Date  Pulse  Maxpulse Calories
22  22        45           NaN    100       119     2820
23  23        60  '2020/12/23'    130       101     3000
24  24        45  '2020/12/24'    105       132     2460
25  25        60  '2020/12/25'    102       126     3345
26  26        60      20201226    100       120     2500
27  27        60  '2020/12/27'     92       118     2410
28  28        60  '2020/12/28'    103       132      NaN
29  29        60  '2020/12/29'    100       132     2800
30  30        60  '2020/12/30'    102       129     3803
31  31        60  '2020/12/31'     92       115     2430
```

In [ ]:
```
print(df['Calories'].tail(10))
```

```
22    2820
23    3000
24    2460
25    3345
26    2500
27    2410
28     NaN
29    2800
30    3803
31    2430
Name: Calories, dtype: object
```

In [ ]:
```
df_new = df
df_new['Calories'].fillna(0, inplace=True)
print(df_new['Calories'].tail(10))
```

```
22    2820
23    3000
24    2460
25    3345
26    2500
27    2410
28       0
29    2800
30    3803
31    2430
Name: Calories, dtype: object
```

```
C:\Users\Gilson\AppData\Local\Temp\ipykernel_6488\2083919503.py:2: FutureWarning:
A value is trying to be set on a copy of a DataFrame or Series through chained as
signment using an inplace method.
The behavior will change in pandas 3.0. This inplace method will never work becau
se the intermediate object on which we are setting values always behaves as a cop
y.

For example, when doing 'df[col].method(value, inplace=True)', try using 'df.meth
od({col: value}, inplace=True)' or df[col] = df[col].method(value) instead, to pe
rform the operation inplace on the original object.


  df_new['Calories'].fillna(0, inplace=True)
```

In [ ]:
```
df_new['Date'].fillna('1900/01/01', inplace=True)
df_new['Date'].replace('1900/01/01', np.nan, inplace=True)
df_new['Date'].replace('20201226', '2020/12/26', inplace=True)
df_new['Date'] = pd.to_datetime(df['Date'], errors='coerce')
print(df_new['Date'])
```

```
0    2020-12-01
1    2020-12-02
2    2020-12-03
3    2020-12-04
4    2020-12-05
5    2020-12-06
6    2020-12-07
7    2020-12-08
8    2020-12-09
9    2020-12-10
10   2020-12-11
11   2020-12-12
12   2020-12-12
13   2020-12-13
14   2020-12-14
15   2020-12-15
16   2020-12-16
17   2020-12-17
18   2020-12-18
19   2020-12-19
20   2020-12-20
21   2020-12-21
22          NaT
23   2020-12-23
24   2020-12-24
25   2020-12-25
26          NaT
27   2020-12-27
28   2020-12-28
29   2020-12-29
30   2020-12-30
31   2020-12-31
Name: Date, dtype: datetime64[ns]
```

In [ ]:
```
print(df_new)
```

	ID	Duration	Date	Pulse	Maxpulse	Calories
0	0	60	2020-12-01	110	130	4091
1	1	60	2020-12-02	117	145	4790
2	2	60	2020-12-03	103	135	3400
3	3	45	2020-12-04	109	175	2824
4	4	45	2020-12-05	117	148	4060
5	5	60	2020-12-06	102	127	3000
6	6	60	2020-12-07	110	136	3740
7	7	450	2020-12-08	104	134	2533
8	8	30	2020-12-09	109	133	1951
9	9	60	2020-12-10	98	124	2690
10	10	60	2020-12-11	103	147	3293
11	11	60	2020-12-12	100	120	2507
12	12	60	2020-12-12	100	120	2507
13	13	60	2020-12-13	106	128	3453
14	14	60	2020-12-14	104	132	3793
15	15	60	2020-12-15	98	123	2750
16	16	60	2020-12-16	98	120	2152
17	17	60	2020-12-17	100	120	3000
18	18	45	2020-12-18	90	112	0
19	19	60	2020-12-19	103	123	3230
20	20	45	2020-12-20	97	125	2430 2
21	1	60	2020-12-21	108	131	3642
22	22	45	NaT	100	119	2820
23	23	60	2020-12-23	130	101	3000
24	24	45	2020-12-24	105	132	2460
25	25	60	2020-12-25	102	126	3345
26	26	60	NaT	100	120	2500
27	27	60	2020-12-27	92	118	2410
28	28	60	2020-12-28	103	132	0
29	29	60	2020-12-29	100	132	2800
30	30	60	2020-12-30	102	129	3803
31	31	60	2020-12-31	92	115	2430