```
In [1]:
         import numpy as np
          import pandas as pd
         df=pd.read_csv('time_dim.csv')
In [4]:
         df.head()
In [5]:
Out[5]:
             time_key
                                  date hour day
                                                      week month quarter year
           0
               T00001
                       20-05-2017 14:56
                                                                 5
                                                                            2017
                                          14
                                               20
                                                   3rd Week
                                                                        Q2
           1
               T00002 30-01-2015 22:14
                                          22
                                               30
                                                   4th Week
                                                                        Q1
                                                                            2015
                                                                 1
           2
               T00003 14-03-2020 02:34
                                          2
                                                                            2020
                                               14
                                                  2nd Week
                                                                 3
                                                                        Q1
               T00004 27-04-2018 12:19
           3
                                                                        Q2 2018
                                          12
                                               27
                                                   4th Week
                                                                 4
                                                                        Q2 2018
               T00005 14-04-2018 10:43
                                          10
                                                  2nd Week
In [6]:
         df.describe()
Out[6]:
                         hour
                                       day
                                                   month
                                                                  year
           count 99999.000000 99999.000000
                                             99999.000000
                                                          99999.000000
                     11.541605
                                  15.763108
                                                 6.517185
                                                           2017.051041
           mean
             std
                     6.912236
                                   8.802384
                                                 3.449301
                                                               2.013111
                     0.000000
                                   1.000000
                                                 1.000000
                                                           2014.000000
            min
            25%
                     6.000000
                                   8.000000
                                                 4.000000
                                                           2015.000000
            50%
                     12,000000
                                  16,000000
                                                 7.000000
                                                           2017.000000
            75%
                     18.000000
                                  23.000000
                                                10.000000
                                                           2019.000000
                    23.000000
                                  31.000000
                                                12,000000
                                                           2021.000000
            max
In [7]:
         df.size
Out[7]: 799992
In [8]: | df.shape
Out[8]: (99999, 8)
```

Out[9]: Index(['time\_key', 'date', 'hour', 'day', 'week', 'month', 'quarter', 'yea

In [9]: |df.columns

r'], dtype='object')

```
In [10]:
          df.rows
          AttributeError
                                                        Traceback (most recent call las
          t)
          ~\AppData\Local\Temp\ipykernel_2176\3342542040.py in ?()
          ----> 1 df.rows
          ~\Ana1\Lib\site-packages\pandas\core\generic.py in ?(self, name)
             5985
                                and name not in self._accessors
             5986
                                and self._info_axis._can_hold_identifiers_and_holds_na
          me(name)
             5987
                           ):
                                return self[name]
             5988
          -> 5989
                            return object.__getattribute__(self, name)
          AttributeError: 'DataFrame' object has no attribute 'rows'
In [12]:
         pd.isnull(df)
Out[12]:
                 time_key
                           date
                                hour
                                       day week month quarter
                                                                 year
              0
                    False False False False
                                                   False
                                                           False False
               1
                    False False
                               False
                                     False False
                                                   False
                                                           False False
               2
                    False False
                               False
                                      False False
                                                   False
                                                           False False
               3
                    False False
                                False
                                      False False
                                                   False
                                                           False False
               4
                    False False False False
                                                   False
                                                           False False
                             ...
                                   ...
                                                     ...
                                                             ...
           99994
                    False False
                               False
                                     False
                                                           False False
                                            False
                                                   False
           99995
                    False False
                               False False False
                                                           False False
                                                   False
           99996
                    False False
                               False False False
                                                   False
                                                           False False
           99997
                    False False False
                                            False
                                                   False
                                                           False False
           99998
                    False False False False
                                                   False
                                                           False False
          99999 rows × 8 columns
In [14]: pd.isnull(pd)
Out[14]: False
In [15]: |pd.notnull(pd)
```

Out[15]: True

```
In [16]: pd.notnull(df)
```

## Out[16]:

	time_key	date	hour	day	week	month	quarter	year
0	True	True	True	True	True	True	True	True
1	True	True	True	True	True	True	True	True
2	True	True	True	True	True	True	True	True
3	True	True	True	True	True	True	True	True
4	True	True	True	True	True	True	True	True
							•••	
99994	True	True	True	True	True	True	True	True
99995	True	True	True	True	True	True	True	True
99996	True	True	True	True	True	True	True	True
99997	True	True	True	True	True	True	True	True
99998	True	True	True	True	True	True	True	True

99999 rows × 8 columns

```
In [17]: df.index
```

Out[17]: RangeIndex(start=0, stop=99999, step=1)

```
In [ ]:
```