```
In [56]: import numpy as np
         import pandas as pd
         import warnings
         import cv2
In [57]: warnings.filterwarnings('ignore')
In [58]: | df=pd.read_csv('u.data',sep="\t")
In [59]: df.head()
Out[59]:
             196 242 3 881250949
          0 186
                 302 3 891717742
              22
                377 1 878887116
          2 244
                  51
                     2 880606923
            166 346 1 886397596
            298 474 4 884182806
In [60]: columns_name=['user_id','item_id','rating','timestamp']
         df=pd.read_csv('u.data',sep="\t",names=columns_name)
In [61]: df.head()
Out[61]:
             user_id item_id rating timestamp
          0
                196
                       242
                               3 881250949
                186
                       302
                               3 891717742
          2
                 22
                       377
                                  878887116
                               2 880606923
          3
                244
                        51
                166
                       346
                               1 886397596
In [62]: df.shape
Out[62]: (100000, 4)
In [63]: | df['user_id']
Out[63]: 0
                196
         1
                186
         2
                22
         3
                244
         4
                166
         99995
                 880
         99996
                 716
         99997
                  276
         99998
                   13
         99999
                   12
         Name: user_id, Length: 100000, dtype: int64
```

```
In [64]: df["user_id"]
Out[64]: 0
               196
         1
               186
         2
               22
         3
               244
               166
         99995
                880
         99996
                716
         99997 276
         99998
                13
         99999
                12
         Name: user_id, Length: 100000, dtype: int64
In [65]: df['user_id'].nunique()
Out[65]: 943
In [66]: df['item_id'].nunique()
Out[66]: 1682
  In [ ]:
 In [78]: import numpy as np
         import pandas as pd
         import warnings
         import cv2
 In [79]: warnings.filterwarnings('ignore')
```

```
In [83]: | movies_title=pd.read_csv('u.item',sep="\|",header=None)
        UnicodeDecodeError
                                           Traceback (most recent call last)
        <ipython-input-83-bee59de46505> in <module>
        ----> 1 movies_title=pd.read_csv('u.item',sep="\|",header=None)
        c:\users\sony\appdata\local\programs\python\python38\lib\site-packages\pandas\io\parser
        s.py in read_csv(filepath_or_buffer, sep, delimiter, header, names, index_col, usecols, squ
        eeze, prefix, mangle dupe cols, dtype, engine, converters, true values, false values, ski
        pinitialspace, skiprows, skipfooter, nrows, na_values, keep_default_na, na_filter, verbos
        e, skip_blank_lines, parse_dates, infer_datetime_format, keep_date_col, date_parser, dayf
        irst, cache_dates, iterator, chunksize, compression, thousands, decimal, lineterminator,
         quotechar, quoting, doublequote, escapechar, comment, encoding, dialect, error_bad_lin
        es, warn_bad_lines, delim_whitespace, low_memory, memory_map, float_precision, stora
        ge_options)
                 kwds.update(kwds defaults)
          603
          604
        --> 605
                  return read(filepath or buffer, kwds)
          606
          607
        c:\users\sony\appdata\local\programs\python\python38\lib\site-packages\pandas\io\parser
        s.py in _read(filepath_or_buffer, kwds)
          461
          462
                 with parser:
        --> 463
                    return parser.read(nrows)
          464
          465
        c:\users\sony\appdata\local\programs\python\python38\lib\site-packages\pandas\io\parser
        s.py in read(self, nrows)
          1050
                  def read(self, nrows=None):
          1051
                    nrows = validate_integer("nrows", nrows)
        -> 1052
                     index, columns, col dict = self. engine.read(nrows)
          1053
          1054
                    if index is None:
        c:\users\sony\appdata\local\programs\python\python38\lib\site-packages\pandas\io\parser
        s.py in read(self, rows)
          2454
                  def read(self, rows=None):
          2455
        -> 2456
                       content = self._get_lines(rows)
          2457
                    except StopIteration:
          2458
                       if self. first chunk:
        c:\users\sony\appdata\local\programs\python\python38\lib\site-packages\pandas\io\parser
        s.py in get lines(self, rows)
          3256
          3257
                              while True:
        -> 3258
                                 new row = self. next iter line(row num=self.pos + rows + 1)
          3259
                                rows += 1
          3260
        c:\users\sony\appdata\local\programs\python\python38\lib\site-packages\pandas\io\parser
        s.py in next iter line(self, row num)
          2957
                       # assert for mypy, data is Iterator[str] or None, would error in next
          2958
                       assert self.data is not None
        -> 2959
                       return next(self.data)
          2960
                    except csv.Error as e:
          2961
                       if self.warn bad lines or self.error bad lines:
```

	c:\users\sony\appdata\local\programs\python\python38\lib\site-packages\pandas\io\parser s.py in _read()		
	2441	yield pat.split(line.strip())	
	2442		
	-> 2443	for line in f:	
	2444	yield pat.split(line.strip())	
	2445		
	c:\users\sony\appdata\local\programs\python\python38\lib\codecs.py in decode(self, input,		
	final)		
	320	# decode input (taking the buffer into account)	
	321	data = self.buffer + input	
	> 322	(result, consumed) = selfbuffer_decode(data, self.errors, final)	
	323	# keep undecoded input until the next call	
	324	self.buffer = data[consumed:]	
	Unicode!	eDecodeError: 'utf-8' codec can't decode byte 0xe9 in position 2892: invalid conti	
In [ ]:			
In [ ]:			
In [ ]:			