```python
import pandas as pd
df=pd.read_csv(r"D:\Documents\python\projects\Udemy.csv", index_col=0)
df
```

Out[1]:

course_id	course_title	is_paid	price	num_subscribers	num_reviews	num_lectures	
288942	#1 Piano Hand Coordination: Play 10th Ballad i...	True	35	3137	18	68	Al
1170074	#10 Hand Coordination - Transfer Chord Ballad ...	True	75	1593	1	41	Intern
1193886	#12 Hand Coordination: Let your Hands dance wi...	True	75	482	1	47	Intern
1116700	#4 Piano Hand Coordination: Fun Piano Runs in ...	True	75	850	3	43	Intern
1120410	#5 Piano Hand Coordination: Piano Runs in 2 ...	True	75	940	3	32	Intern
...	...	...	...	...	...	...	
328960	Your Own Site in 45 Min: The Complete Wordpres...	True	120	1566	29	36	Al
552700	Your Second Course on Piano: Two Handed Playing	True	70	1018	12	22	Be
631754	Zend Framework 2: Learn the PHP framework ZF2 ...	True	40	723	130	37	Al
1225194	Zoho Books Gestion Financière	False	Free	229	0	33	Al

	course_title	is_paid	price	num_subscribers	num_reviews	num_lectures
course_id						
	d'Entreprise pas…					
964478	Zombie Apocalypse Photoshop Actions	True	50	12	1	15	Al

3682 rows × 10 columns

In [2]: `df.columns`

Out[2]:
```
Index(['course_title', 'is_paid', 'price', 'num_subscribers', 'num_reviews',
       'num_lectures', 'level', 'content_duration', 'published_timestamp',
       'subject'],
      dtype='object')
```

In [4]: `print(f"The different subjects for which Udemy is offering courses is \n ",df.subje`

```
The different subjects for which Udemy is offering courses is
 ['Musical Instruments' 'Business Finance' 'Graphic Design'
 'Web Development']
```

In [5]: `print(f"The subject that has the maximum number of courses is \n",df.subject.value_`

```
The subject that has the maximum number of courses is
 subject
Web Development        1200
Business Finance       1199
Musical Instruments     680
Graphic Design          603
Name: count, dtype: int64
```

In [6]: `print(f"The courses which are 'Free of Cost ' are \n",df[df.is_paid==False] )`

```
The courses which are 'Free of Cost ' are
                                              course_title  is_paid price  \
course_id
286070          5 lecciones que todo guitarrista debe tomar    False  Free
696630          7 Ways A Beginner Guitarist Can Sound Better, ...  False  Free
955914          A beginner`s guide to fingerpicking and strumm...  False  Free
270976                              A how to guide in HTML    False  Free
1214144         ¡Triunfar en La Bolsa de Valores No Requiere d...  False  Free
...                                                      ...     ...   ...
552598          WordPress in under an hour - Create/manage you...  False  Free
1068590                         Wordpress Website Mastery 2017    False  Free
752706          Write quicker HTML5 and CSS 3; productivity ha...  False  Free
1257976         Your First 10 Guitar Lessons - Learn how to pl...  False  Free
1225194         Zoho Books Gestion Financière d'Entreprise pas...  False  Free

           num_subscribers  num_reviews  num_lectures           level  \
course_id
286070                4452          263            14  Beginner Level
696630                4529          193             7  Beginner Level
955914                3481           29            20  Beginner Level
270976                7318          205             8  Beginner Level
1214144                338            7             6  Beginner Level
...                    ...          ...           ...             ...
552598                6474           86            15      All Levels
1068590               5181           64            22  Beginner Level
752706               13016          286            15      All Levels
1257976                924            4            18  Beginner Level
1225194                229            0            33      All Levels

           content_duration   published_timestamp              subject
course_id
286070               1 hour  2014-08-23T05:08:14Z  Musical Instruments
696630              36 mins  2015-12-21T18:50:50Z  Musical Instruments
955914              2 hours  2016-09-13T21:51:59Z  Musical Instruments
270976              35 mins  2014-08-10T20:19:10Z      Web Development
1214144              1 hour  2017-05-30T14:30:12Z     Business Finance
...                     ...                   ...                  ...
552598               1 hour  2015-07-15T00:21:56Z      Web Development
1068590            2.5 hours  2017-01-18T17:01:40Z      Web Development
752706             1.5 hours  2016-03-03T17:45:31Z      Web Development
1257976              1 hour  2017-06-29T00:29:36Z  Musical Instruments
1225194             2 hours  2017-05-26T16:45:55Z     Business Finance

[310 rows x 10 columns]
```

```
In [7]:  print(f"The courses which are 'Paid ' are \n",df[df.is_paid==True] )
```

```
The courses which are 'Paid ' are
                                          course_title  is_paid  price  \
course_id
288942     #1 Piano Hand Coordination: Play 10th Ballad i...     True     35
1170074    #10 Hand Coordination - Transfer Chord Ballad ...     True     75
1193886    #12 Hand Coordination: Let your Hands dance wi...     True     75
1116700    #4 Piano Hand Coordination: Fun Piano Runs in ...     True     75
1120410    #5  Piano Hand Coordination:  Piano Runs in 2 ...     True     75
...                                                 ...      ...    ...
498488     Your First Successful Forex Trades - With Case...     True    200
328960     Your Own Site in 45 Min: The Complete Wordpres...     True    120
552700       Your Second Course on Piano: Two Handed Playing     True     70
631754     Zend Framework 2: Learn the PHP framework ZF2 ...     True     40
964478                     Zombie Apocalypse Photoshop Actions     True     50

           num_subscribers  num_reviews  num_lectures             level  \
course_id
288942                3137           18            68        All Levels
1170074               1593            1            41  Intermediate Level
1193886                482            1            47  Intermediate Level
1116700                850            3            43  Intermediate Level
1120410                940            3            32  Intermediate Level
...                    ...          ...           ...               ...
498488                1079           34            16        All Levels
328960                1566           29            36        All Levels
552700                1018           12            22     Beginner Level
631754                 723          130            37        All Levels
964478                  12            1            15        All Levels

           content_duration   published_timestamp              subject
course_id
288942            1.5 hours  2014-09-18T05:07:05Z  Musical Instruments
1170074             1 hour  2017-04-12T19:06:34Z  Musical Instruments
1193886          1.5 hours  2017-04-26T18:34:57Z  Musical Instruments
1116700             1 hour  2017-02-21T23:48:18Z  Musical Instruments
1120410            37 mins  2017-02-21T23:44:49Z  Musical Instruments
...                    ...                   ...                  ...
498488           2.5 hours  2015-05-26T20:48:48Z     Business Finance
328960             4 hours  2015-04-20T22:15:17Z      Web Development
552700             5 hours  2015-10-26T20:04:21Z  Musical Instruments
631754           6.5 hours  2015-11-11T18:55:45Z      Web Development
964478           1.5 hours  2016-09-26T22:19:48Z       Graphic Design

[3372 rows x 10 columns]
```

In [11]: `print(f"The Top Selling Courses i.e most subscribers are \n {df.sort_values('num_su`

```
The Top Selling Courses i.e most subscribers are
                                           course_title  is_paid price  \
course_id
41295             Learn HTML5 Programming From Scratch    False   Free
59014                   Coding for Entrepreneurs Basic    False   Free
625204                     The Web Developer Bootcamp     True    200
173548     Build Your First Website in 1 Week with HTML5 ...  False   Free
764164                The Complete Web Developer Course 2.0   True    200
...                                               ...     ...    ...
1223240    Learn Pirates of the Caribbean by Ear on the P...  True     20
1258666            Financial Statement Auditing Cycles    True     50
1215926                Kickstarter success in 5 easy steps    True     20
1247992    Introduction to Project Management for Finance...  True     50
1087466    Stop Creditors from Harassing you and Avoid Ba...  True     20

           num_subscribers  num_reviews  num_lectures              level  \
course_id
41295               268923         8629            45         All Levels
59014               161029          279            27      Beginner Level
625204              121584        27445           342         All Levels
173548              120291         5924            30      Beginner Level
764164              114512        22412           304         All Levels
...                    ...          ...           ...                ...
1223240                  0            0             6         All Levels
1258666                  0            0             9  Intermediate Level
1215926                  0            0            12         All Levels
1247992                  0            0             9      Beginner Level
1087466                  0            0             7      Beginner Level

           content_duration   published_timestamp             subject
course_id
41295            10.5 hours  2013-02-14T07:03:41Z     Web Development
59014             3.5 hours  2013-06-09T15:51:55Z     Web Development
625204             43 hours  2015-11-02T21:13:27Z     Web Development
173548              3 hours  2014-04-08T16:21:30Z     Web Development
764164           30.5 hours  2016-03-08T22:28:36Z     Web Development
...                    ...                   ...                ...
1223240            32 mins  2017-05-22T17:14:43Z  Musical Instruments
1258666            2 hours  2017-06-29T23:20:10Z     Business Finance
1215926            31 mins  2017-05-16T14:55:28Z     Business Finance
1247992            2 hours  2017-07-03T21:40:32Z     Business Finance
1087466            37 mins  2017-02-02T16:22:37Z     Business Finance

[3682 rows x 10 columns]
```

In [12]: `print(f"The Least Selling Courses i.e least subscribers are \n {df.sort_values('num`

The Least Selling Courses i.e least subscribers are

	course_title	is_paid	price
course_id			
1233314	Building a Balanced Scorecard	True	50
1232282	The Cash Flow Statement - An Introduction	True	50
1275872	The Complete Adobe Spark Course	True	150
726314	Create Beautiful Image Maps for Your Website	True	20
715476	The Cuckoo Strategy to get European Funding	True	160
...	...	...	...
764164	The Complete Web Developer Course 2.0	True	200
173548	Build Your First Website in 1 Week with HTML5 ...	False	Free
625204	The Web Developer Bootcamp	True	200
59014	Coding for Entrepreneurs Basic	False	Free
41295	Learn HTML5 Programming From Scratch	False	Free

	num_subscribers	num_reviews	num_lectures	level
course_id				
1233314	0	0	11	Intermediate Level
1232282	0	0	10	Beginner Level
1275872	0	0	29	All Levels
726314	0	0	8	Intermediate Level
715476	0	0	6	All Levels
...	...	...	...	...
764164	114512	22412	304	All Levels
173548	120291	5924	30	Beginner Level
625204	121584	27445	342	All Levels
59014	161029	279	27	Beginner Level
41295	268923	8629	45	All Levels

	content_duration	published_timestamp	subject
course_id			
1233314	2 hours	2017-07-03T21:38:22Z	Business Finance
1232282	1.5 hours	2017-06-28T16:05:51Z	Business Finance
1275872	2 hours	2017-07-03T17:39:57Z	Graphic Design
726314	37 mins	2016-01-18T17:56:36Z	Graphic Design
715476	1 hour	2016-01-06T02:38:23Z	Business Finance
...	...	...	...
764164	30.5 hours	2016-03-08T22:28:36Z	Web Development
173548	3 hours	2014-04-08T16:21:30Z	Web Development
625204	43 hours	2015-11-02T21:13:27Z	Web Development
59014	3.5 hours	2013-06-09T15:51:55Z	Web Development
41295	10.5 hours	2013-02-14T07:03:41Z	Web Development

[3682 rows x 10 columns]

```python
In [38]: #Code wont work since there are different data types in price especially the string
         df['price']=df['price'].str.replace('Free','0')
         pd.to_numeric(df['price'])
         print(f"The courses of Graphic Design where the price is below 100 are \n {df[(df.s
```

The courses of Graphic Design where the price is below 100 are

```
                                    course_title  is_paid price  \
course_id
733878     Adobe Illustrator Course in Urdu Basics Level ...   False      0
723818                        Adobe Indesign CC Başlangıç       False      0
896742               Aprenda Modelagem 3D com o 123D Design     False      0
1249378    AutoCAD Course - Learn Online AutoCAD in Urdu ...   False      0
1261122              画像加工の初心者でも「1日」で初歩を覚えられる無料講座     False      0
1185535                   Cómo crear maquetas con Adobe XD      False      0
809216     Canva: Design Album Cover Artwork in Minutes -...   False      0
902300          Convert Image to Vector in Adobe illustrator   False      0
650720                 Creare un logo con Adobe Illustrator    False      0
874656       Create Stunning Infographics to Share your Ideas  False      0
1181578    Deinen Roman setzen mit PagePlus in 10 einfach...   False      0
901082     Digital Art in Adobe Illustrator CC: Angry Bir...   False      0
525446                                       Draw a Kitten      False      0
755680             Draw a realistic Fantail using pencil       False      0
609642                                 Ferramentas Visuais      False      0
17349      Figure Drawing From Life Using The Reilly Tech...   False      0
660876             Graphic Design - An Overview of the Field   False      0
930416     How to design a business card on Photoshop (fo...   False      0
1132572    How to Design an Awesome Letterhead in Adobe I...   False      0
1156778    How to stylize your photos in Photoshop with c...   False      0
590794           Illustrator Quick Tip: 10分でKawaiiカメレオンを描こう    False      0
1260674    Learn Comic Book Color Flatting! (Coloring Ass...   False      0
627782     Learn Illustrator By Recreating Top 3 Logos - ...   False      0
22445      Learn to Design a Letterhead - A Beginners Course   False      0
1047508    Make yourself a Santa Claus: Photoshop Manipul...   False      0
787340     Most Wanted Flat Design Techniques #1: Desert ...   False      0
1226518      Photoshop & Illustrator CC Essentials in Arabic   False      0
1257870               Photoshop CC 2015 Top New Features       False      0
1223336      Photoshop Essentials - Uma Introdução Detalhada   False      0
348116     Photoshop In-Depth: Master all of Photoshop's ...   False      0
611804                   Primeros Pasos con Photoshop CC       False      0
399938          Professional Logo Design in Adobe Illustrator  False      0
611370     Quote Images for Pinterest, Facebook, & Instagram  False      0
839536     Start Making Comics with Manga Studio 5 / Clip...   False      0
1245392               Voxel 3D Model Creation Course           False      0


           num_subscribers  num_reviews  num_lectures              level  \
course_id
733878                1433           57             8        Beginner Level
723818                 637           21            22        Beginner Level
896742                 334           26            27        Beginner Level
1249378                105            2            22            All Levels
1261122                 21            0            18        Beginner Level
1185535                217            2            21        Beginner Level
809216                3103           42            11        Beginner Level
902300                3251          158            13     Intermediate Level
650720                1447          121            13            All Levels
874656                5175          470             7        Beginner Level
1181578                 69            6            25            All Levels
901082                3108           27            28        Beginner Level
525446                3812           68            11            All Levels
755680                6754          109            20            All Levels
```

```
  609642            817          42          18         Beginner Level
   17349          47811        1041          22            All Levels
  660876          23229        2215          12         Beginner Level
  930416           5086         197          12         Beginner Level
 1132572           4776         115          18            All Levels
 1156778           3512          58          17         Beginner Level
  590794            381          24           7            All Levels
 1260674            946           3           6         Beginner Level
  627782           8786         245          11         Beginner Level
   22445          24687         423          13            All Levels
 1047508           2665          20           8            All Levels
  787340           4294         143          15    Intermediate Level
 1226518           3329         193          33         Beginner Level
 1257870           1477           3          13            All Levels
 1223336            800          39          24         Beginner Level
  348116          53851        1779          45            All Levels
  611804           6429         654          31         Beginner Level
  399938          44044        1563          45            All Levels
  611370          12103         576          18         Beginner Level
  839536           5301         125          77            All Levels
 1245392           1031           9           8            All Levels
```

```
           content_duration   published_timestamp        subject
 course_id
 733878            1 hour    2016-01-19T17:22:59Z  Graphic Design
 723818          2.5 hours   2016-01-14T18:52:21Z  Graphic Design
 896742            1 hour    2016-07-07T21:15:34Z  Graphic Design
1249378           2 hours    2017-06-13T17:32:48Z  Graphic Design
1261122            1 hour    2017-06-22T15:01:32Z  Graphic Design
1185535           3 hours    2017-05-28T16:17:36Z  Graphic Design
 809216           40 mins    2016-04-07T23:57:25Z  Graphic Design
 902300           31 mins    2016-07-13T16:57:42Z  Graphic Design
 650720            1 hour    2015-10-29T00:10:41Z  Graphic Design
 874656           30 mins    2016-08-14T22:04:11Z  Graphic Design
1181578          3.5 hours   2017-04-24T16:44:12Z  Graphic Design
 901082          2.5 hours   2016-08-12T17:34:45Z  Graphic Design
 525446          1.5 hours   2015-06-12T18:37:40Z  Graphic Design
 755680            1 hour    2016-02-11T22:05:05Z  Graphic Design
 609642           5 hours    2015-10-09T23:42:33Z  Graphic Design
  17349          2.5 hours   2012-05-09T18:14:57Z  Graphic Design
 660876            1 hour    2015-11-09T19:10:57Z  Graphic Design
 930416            1 hour    2016-08-27T19:02:40Z  Graphic Design
1132572           34 mins    2017-03-03T03:20:22Z  Graphic Design
1156778          1.5 hours   2017-03-30T16:26:36Z  Graphic Design
 590794           36 mins    2015-08-31T20:52:45Z  Graphic Design
1260674           40 mins    2017-06-20T17:57:00Z  Graphic Design
 627782            1 hour    2015-10-04T19:36:34Z  Graphic Design
  22445           44 mins    2012-10-10T23:34:55Z  Graphic Design
1047508           34 mins    2016-12-22T17:10:35Z  Graphic Design
 787340            1 hour    2016-03-17T18:15:21Z  Graphic Design
1226518          3.5 hours   2017-05-31T23:16:00Z  Graphic Design
1257870           39 mins    2017-06-26T19:37:58Z  Graphic Design
1223336          2.5 hours   2017-05-22T09:58:21Z  Graphic Design
 348116          4.5 hours   2014-11-30T04:22:11Z  Graphic Design
 611804          2.5 hours   2015-09-23T15:30:59Z  Graphic Design
 399938          7.5 hours   2015-01-22T11:18:06Z  Graphic Design
```

```
611370              1 hour   2015-09-24T19:47:45Z   Graphic Design
839536           6.5 hours   2016-06-21T02:49:47Z   Graphic Design
1245392           39 mins    2017-06-08T22:46:39Z   Graphic Design
```

In [40]:
```python
#for i in df['price'].str.contains('Free'):
#    if df['price'].str.contains('Free') == True:
#        df.drop(df.price[i])
print(f"The Courses realted to 'Python' are \n {df[df.course_title.str.contains('Py
```

The Courses realted to 'Python' are

```
                                          course_title  is_paid price  \
course_id
599504     Advanced Scalable Python Web Development Using...     True    120
47963      Coding for Entrepreneurs: Learn Python, Django...    True    195
631128     Complete Python Web Course: Build 8 Python Web...    True    110
186096     Core: A Web App Reference Guide for Django, Py...    True    195
394832     Fun and creative web engineering with Python a...   False      0
1038538              Introduction to QGIS Python Programming     True     85
902888              Investment Portfolio Analysis with Python     True     50
391546           Learn Python and Django: Payment Processing     True     70
1063722                Learn Python Django - A Hands-On Course     True     50
546848     Learn to code in Python and learn Adobe Photos...    True     50
368340       Professional Python Web Development Using Flask     True    120
1035940    Professional RESTful API Design using Python F...    True    120
270808                       Projects in Django and Python     True     60
1170894    Python Algo Stock Trading: Automate Your Trading!    True     95
1070886           Python Algo Trading: FX Trading with Oanda     True    200
1196544    Python Algo Trading: Sentiment Trading with News     True    200
822444     Python and Django Full Stack Web Developer Boo...    True    200
477702     Python for Beginners: Python Programming Langu...    True    150
1035472    Python for Finance: Investment Fundamentals & ...    True    195
529828                     Python for Trading & Investing     True     95
70640      Python Programming: Create an Digital Marketpl...    True    195
523312                           Python Web Programming     True    100
1088656       Quantitative Trading Analysis with Python     True     50
970600                REST APIs with Flask and Python     True    110
815482                Stock Technical Analysis with Python     True     50
938560     The Complete Ethical Hacking Course 2.0: Pytho...    True    195
76052      Try Django 1.9 | Build a Blog and Learn Python...    True     50
16646                       Web Programming with Python     True     50
574082           Web Scraping with Python, Ruby & import. io     True     75
```

```
           num_subscribers  num_reviews  num_lectures              level  \
course_id
599504                1299           56            71  Intermediate Level
47963                23412          799           251          All Levels
631128                7489          941           173          All Levels
186096                2497           98           154          All Levels
394832               10917          319            25          All Levels
1038538                197           26            28      Beginner Level
902888                 209           13            37          All Levels
391546               17714          198            23          All Levels
1063722               1339           21            18      Beginner Level
546848                1132            1            29          All Levels
368340                3420          489           102      Beginner Level
1035940                578           25            36  Intermediate Level
270808                1764           53            28          All Levels
1170894               1165           21            41      Beginner Level
1070886                453           42            33  Intermediate Level
1196544                294           19            42          All Levels
822444               11832         1883           191          All Levels
477702                6153          125            84      Beginner Level
1035472               3811          278           103          All Levels
529828                 638           25            36          All Levels
70640                 4198          145           161          All Levels
```

```
523312              1020           46           60       Beginner Level
1088656              256           17           49          All Levels
970600              5151          737          115    Intermediate Level
815482               409           35           46          All Levels
938560              7827          268           66          All Levels
76052               7407          172          147          All Levels
16646              35267          217           53          All Levels
574082               973           50           46          All Levels


           content_duration    published_timestamp          subject
course_id
599504          14 hours     2016-08-11T22:09:24Z   Web Development
47963           45 hours     2013-04-08T00:46:14Z   Web Development
631128          16 hours     2015-11-08T20:57:35Z   Web Development
186096          26 hours     2014-05-29T00:58:43Z   Web Development
394832           2 hours     2015-06-09T19:51:50Z   Web Development
1038538        3.5 hours     2016-12-22T00:11:22Z   Web Development
902888           7 hours     2016-07-13T21:40:32Z   Business Finance
391546         3.5 hours     2015-02-09T15:37:56Z   Web Development
1063722          2 hours     2017-01-18T21:53:34Z   Web Development
546848           2 hours     2015-07-08T00:15:12Z    Graphic Design
368340        14.5 hours     2015-03-04T00:10:36Z   Web Development
1035940        4.5 hours     2017-01-11T21:15:25Z   Web Development
270808         6.5 hours     2014-10-21T07:58:07Z   Web Development
1170894        2.5 hours     2017-05-28T23:41:03Z   Business Finance
1070886          3 hours     2017-03-14T00:39:45Z   Business Finance
1196544          7 hours     2017-04-28T16:41:44Z   Business Finance
822444        31.5 hours     2017-02-24T18:40:55Z   Web Development
477702           5 hours     2015-06-14T18:18:57Z   Web Development
1035472        6.5 hours     2017-03-30T22:17:09Z   Business Finance
529828           5 hours     2015-06-17T22:23:31Z   Business Finance
70640           26 hours     2013-10-20T19:53:28Z   Web Development
523312           6 hours     2015-07-01T21:46:36Z   Web Development
1088656        5.5 hours     2017-01-27T17:11:28Z   Business Finance
970600        12.5 hours     2016-11-06T19:00:38Z   Web Development
815482           8 hours     2016-04-12T00:40:03Z   Business Finance
938560          11 hours     2016-09-26T15:08:29Z   Web Development
76052           20 hours     2014-03-04T07:12:21Z   Web Development
16646            4 hours     2012-04-25T00:01:43Z   Web Development
574082         4.5 hours     2015-08-09T22:16:41Z   Web Development      and they are 2
9 in number
```

In [48]:
```python
df.dtypes
#convert published_timestamp     to datetime format
df['published_timestamp']=pd.to_datetime(df.published_timestamp)
df.dtypes
# Create a new coliumn year from published_timestamp    column
df['Year']=df['published_timestamp'].dt.year
df.head(5)
print(f"The courses that published in 2015 are {len(df[df.Year==2015])} as follows
```

The courses that published in 2015 are 1014 as follows

```
                                               course_title  is_paid price  \
course_id
591880     1 - Concepts of Statistics For Beginners Step ...    True    200
302450          10 Numbers Every Business Owner Should Know     True     20
384928     101 Blues riffs - learn how the harmonica supe...    True    200
550842     16 Guitar Chords to Jam With - (Beginner - Int...    True     20
486240          2 Easy Steps To Investment And Avoiding Traps   True     20
...                                                     ...     ...    ...
551170                         Your First Course on Piano       True     70
498488     Your First Successful Forex Trades - With Case...    True    200
328960     Your Own Site in 45 Min: The Complete Wordpres...    True    120
552700        Your Second Course on Piano: Two Handed Playing   True     70
631754     Zend Framework 2: Learn the PHP framework ZF2 ...    True     40


           num_subscribers  num_reviews  num_lectures              level  \
course_id
591880                 273            4            15      Beginner Level
302450                  13            1             9         All Levels
384928                1350           65            55  Intermediate Level
550842                1224           19            20      Beginner Level
486240                 828            1            20         All Levels
...                    ...          ...           ...                ...
551170                2002           34            33      Beginner Level
498488                1079           34            16         All Levels
328960                1566           29            36         All Levels
552700                1018           12            22      Beginner Level
631754                 723          130            37         All Levels


           content_duration       published_timestamp            subject  \
course_id
591880             31 mins  2015-08-30 22:48:34+00:00    Business Finance
302450              1 hour  2015-03-08 19:11:24+00:00    Business Finance
384928           6.5 hours  2015-01-04 21:14:31+00:00  Musical Instruments
550842              1 hour  2015-07-10 19:53:56+00:00  Musical Instruments
486240              1 hour  2015-04-27 23:18:59+00:00    Business Finance
...                    ...                        ...                ...
551170             4 hours  2015-07-16 17:07:49+00:00  Musical Instruments
498488           2.5 hours  2015-05-26 20:48:48+00:00    Business Finance
328960             4 hours  2015-04-20 22:15:17+00:00     Web Development
552700             5 hours  2015-10-26 20:04:21+00:00  Musical Instruments
631754           6.5 hours  2015-11-11 18:55:45+00:00     Web Development


           Year
course_id
591880     2015
302450     2015
384928     2015
550842     2015
486240     2015
...         ...
551170     2015
498488     2015
328960     2015
552700     2015
631754     2015
```

[1014 rows x 11 columns]

In [53]: `df.level.unique()`

Out[53]: array(['All Levels', 'Intermediate Level', 'Beginner Level',
          'Expert Level'], dtype=object)

In [52]: `print(f"The max No of Subscribers for each Level of Courses is \n {df.groupby('leve`

The max No of Subscribers for each Level of Courses is
 level
All Levels   268923
Beginner Level   161029
Expert Level   5172
Intermediate Level   29167
Name: num_subscribers, dtype: int64

In [ ]: