

```
In [1]: import pandas as pd

df = pd.read_csv('C:\Users\alice\Desktop\amazon-order.csv')
df.head()
```

File "<ipython-input-1-cf0a4bf74801>", line 3
df = pd.read_csv('C:\Users\alice\Desktop\amazon-order.csv')
^
SyntaxError: (unicode error) 'unicodeescape' codec can't decode bytes in position 2-3: truncated \UXXXXXXXX escape

```
In [3]: import pandas as pd

df = pd.read_csv('amazon-order.csv')
df.head()
```

Out[3]:

	Order Date	Order ID	Title	Category	ASIN/ISBN	UNSPSC Code	Website	Release Date	Col
0	1/16/2017	4423970-9538658	Essentials of Corporate Finance (Mcgraw-hill/I...	ABIS_BOOK	1259277216	55101500.0	Amazon.com	2016-02-18T00:00:01	acc
1	1/16/2017	2550400-8877847	Leadership: Theory, Application, & Skill Devel...	ABIS_BOOK	1285866355	55101500.0	Amazon.com	2015-01-01T00:00:01	acc
2	1/16/2017	9164244-5401016	Essentials of Marketing Research (with Qualtri...	ABIS_BOOK	1305263472	55101500.0	Amazon.com	2015-04-01T00:00:01	acc
3	1/20/2017	0397678-7589858	Introduction to Information Systems: Supportin...	ABIS_BOOK	1118674367	55101500.0	Amazon.com	2013-11-11T00:00:01	acc
4	8/14/2017	1405284-4307450	Intermediate Accounting	ABIS_BOOK	1118743202	55101500.0	Amazon.com	2016-04-04T00:00:01	acc

5 rows × 36 columns

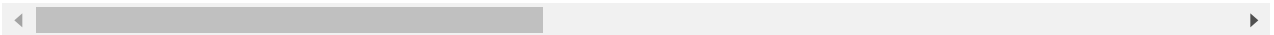
```
In [7]: df = df.fillna(0)
df.head()
```

Out[7]:

	Order Date	Order ID	Title	Category	ASIN/ISBN	UNSPSC Code	Website	Release Date	Col
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	Order Date	Order ID	Title	Category	ASIN/ISBN	UNSPSC Code	Website	Release Date	Co
0	1/16/2017	110-4423970-9538658	Essentials of Corporate Finance (Mcgraw-hill/I...	ABIS_BOOK	1259277216	55101500.0	Amazon.com	2016-02-18T00:00:01	acc
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5 rows × 36 columns



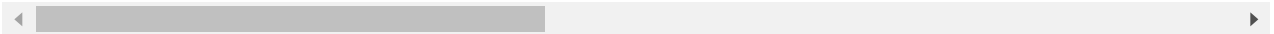
```
In [10]: df['Item Total'] = df['Item Total'].str.replace('$', '').astype(float)
df.head()
```

Out[10]:

	Order Date	Order ID	Title	Category	ASIN/ISBN	UNSPSC Code	Website	Release Date	Co
0	1/16/2017	110-4423970-9538658	Essentials of Corporate Finance (Mcgraw-hill/I...	ABIS_BOOK	1259277216	55101500.0	Amazon.com	2016-02-18T00:00:01	acc
1	1/16/2017	110-2550400-8877847	Leadership: Theory, Application, & Skill Devel...	ABIS_BOOK	1285866355	55101500.0	Amazon.com	2015-01-01T00:00:01	acc
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5 rows × 36 columns



```
In [15]: df['Item Total'].sum()
```

Out[15]: 2422.77

```
In [12]: df['Item Total'].mean()
```

Out[12]: 13.385469613259666

```
In [13]: df['Item Total'].median()
```

Out[13]: 5.4

```
In [16]: df['Item Total'].max()
```

Out[16]: 142.02

```
In [17]: df['Item Total'].min()
```

Out[17]: 0.0

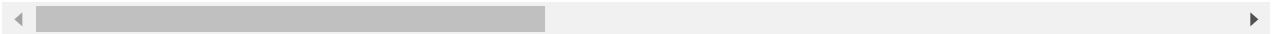
```
In [18]: df['Item Subtotal Tax'] = df['Item Subtotal Tax'].str.replace('$', '').astype(float)
df.head()
```

Out[18]:

	Order Date	Order ID	Title	Category	ASIN/ISBN	UNSPSC Code	Website	Release Date	Co
0	1/16/2017	110-4423970-9538658	Essentials of Corporate Finance (Mcgraw-hill/I...	ABIS_BOOK	1259277216	55101500.0	Amazon.com	2016-02-18T00:00:01	acc
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3	1/20/2017	110-0397678-7589858	Introduction to Information Systems: Supportin...	ABIS_BOOK	1118674367	55101500.0	Amazon.com	2013-11-11T00:00:01	acce
4	8/14/2017	112-1405284-4307450	Intermediate Accounting	ABIS_BOOK	1118743202	55101500.0	Amazon.com	2016-04-04T00:00:01	acce

5 rows × 36 columns



```
In [19]: df['Item Subtotal Tax'].sum()
```

Out[19]: 142.82

```
In [20]: df['Item Total'].sum() / df['Item Subtotal Tax'].sum()
```

Out[20]: 16.96380058815292

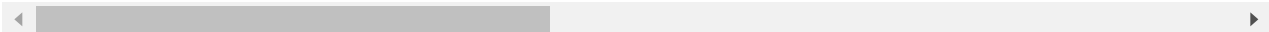
```
In [21]: df['Order Date'] = pd.to_datetime(df['Order Date'])
df.head()
```

Out[21]:

	Order Date	Order ID	Title	Category	ASIN/ISBN	UNSPSC Code	Website	Release Date	Condi
0	2017-01-16	110-4423970-9538658	Essentials of Corporate Finance (Mcgraw-hill/I...	ABIS_BOOK	1259277216	55101500.0	Amazon.com	2016-02-18T00:00:01	u: accepta
1	2017-01-16	110-2550400-8877847	Leadership: Theory, Application, & Skill Devel...	ABIS_BOOK	1285866355	55101500.0	Amazon.com	2015-01-01T00:00:01	u: accepta
2	2017-01-16	110-9164244-5401016	Essentials of Marketing Research (with Qualtri...	ABIS_BOOK	1305263472	55101500.0	Amazon.com	2015-04-01T00:00:01	u: accepta

	Order Date	Order ID	Title	Category	ASIN/ISBN	UNSPSC Code	Website	Release Date	Condit
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4	2017-08-14	112-1405284-4307450	Intermediate Accounting	ABIS_BOOK	1118743202	55101500.0	Amazon.com	2016-04-04T00:00:01	u: accepta

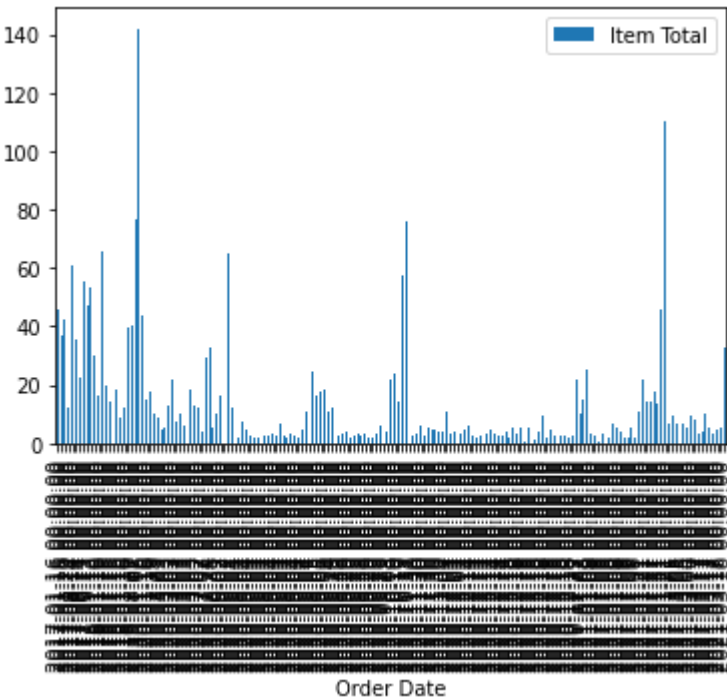
5 rows × 36 columns



```
In [22]: %matplotlib inline
```

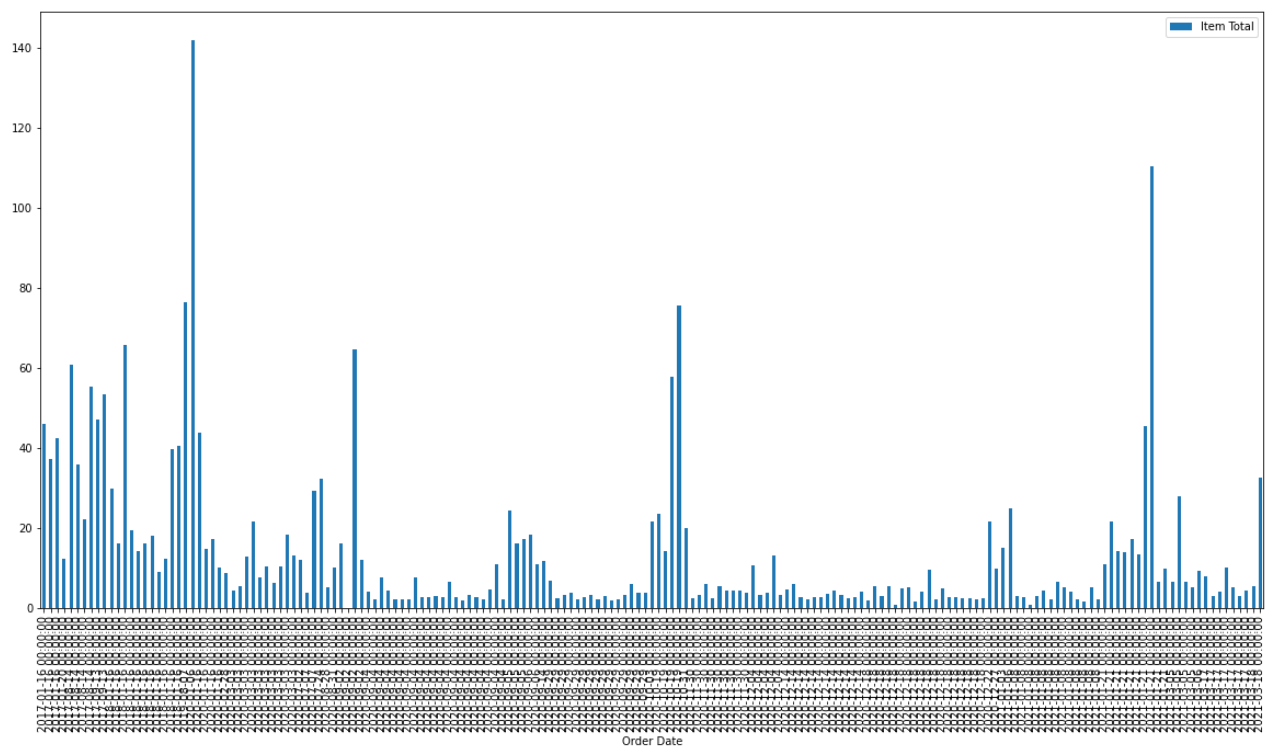
```
In [23]: df.plot.bar(x='Order Date', y='Item Total', rot=90)
```

Out[23]: <AxesSubplot:xlabel='Order Date'>



```
In [24]: df.plot.bar(x='Order Date', y='Item Total', rot=90, figsize=(20,10))
```

Out[24]: <AxesSubplot:xlabel='Order Date'>

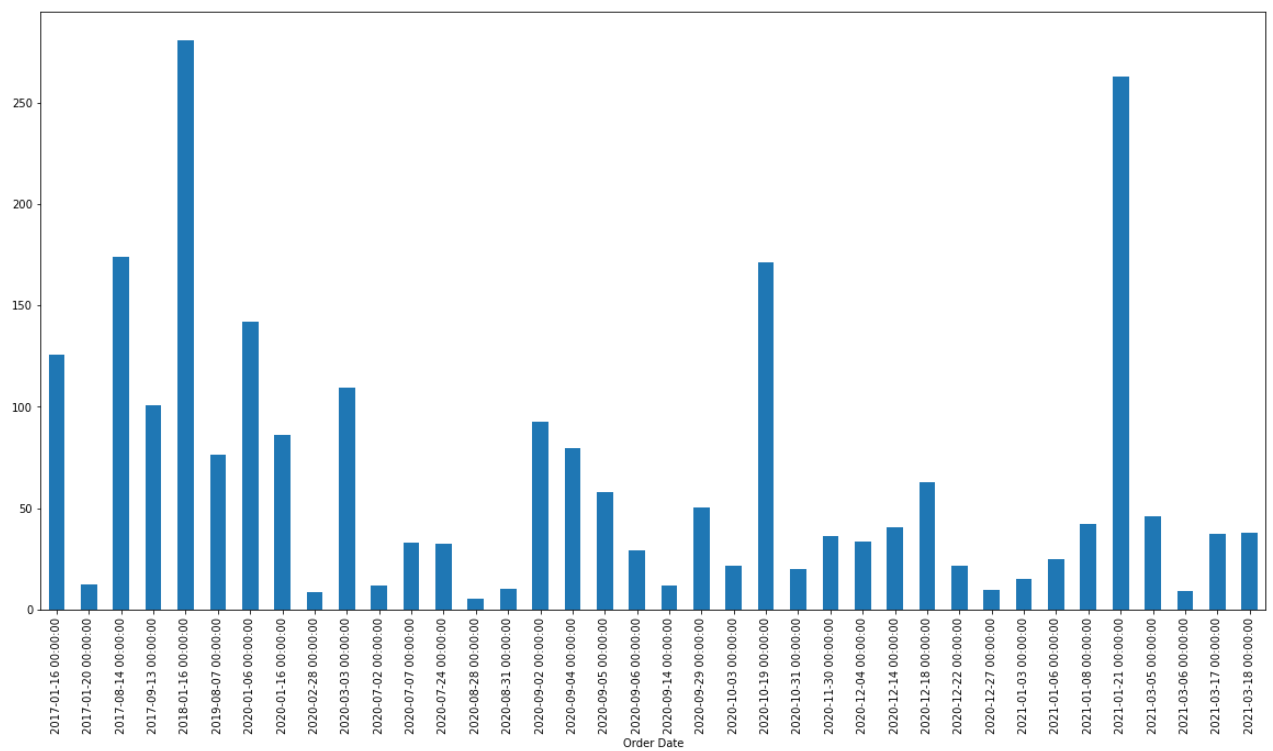


```
In [25]: daily_orders = df.groupby('Order Date').sum() ['Item Total']
daily_orders.head()
```

```
Out[25]: Order Date
2017-01-16    125.50
2017-01-20     12.38
2017-08-14    174.02
2017-09-13    100.65
2018-01-16    281.02
Name: Item Total, dtype: float64
```

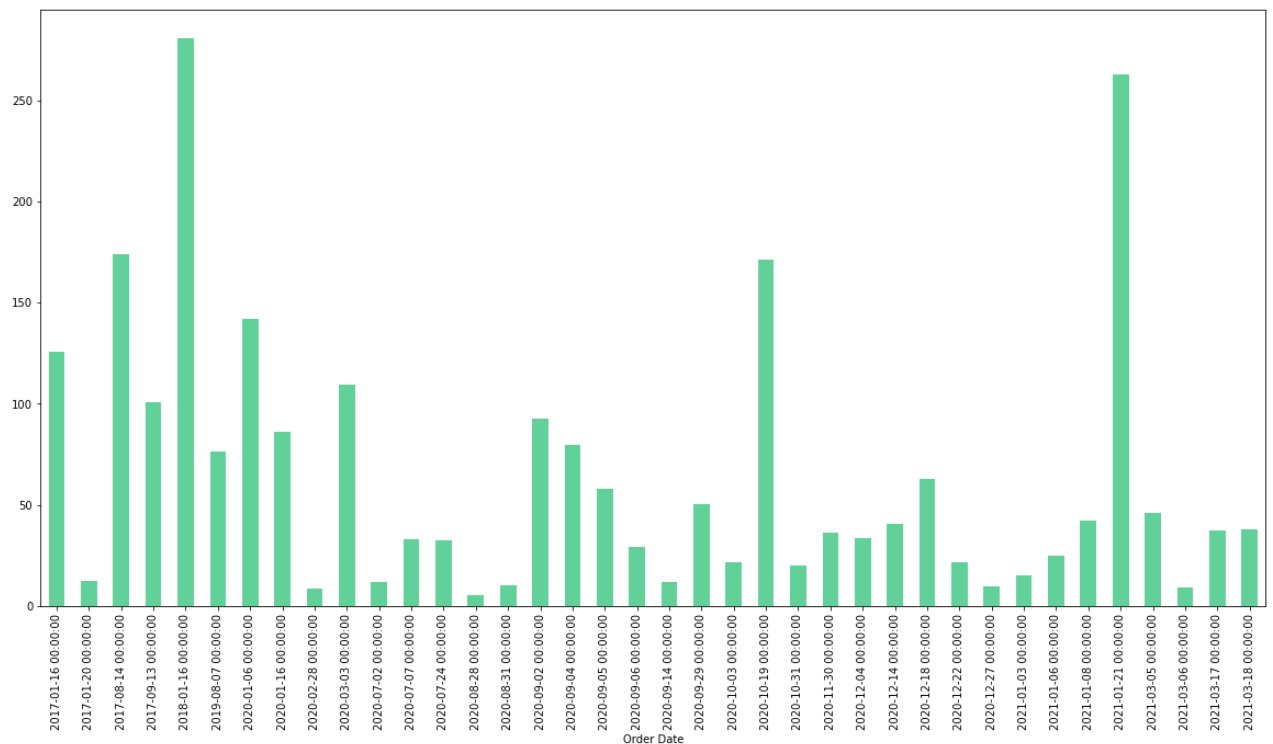
```
In [26]: daily_orders.plot.bar(figsize=(20,10))
```

```
Out[26]: <AxesSubplot:xlabel='Order Date'>
```



```
In [28]: daily_orders.plot.bar(figsize=(20,10), color='#61D199')
```

```
Out[28]: <AxesSubplot:xlabel='Order Date'>
```



```
In [ ]:
```