In [1]:
```
import pandas as py
import numpy as np
```

IMPORT AND PRINT DATA SET

In [2]:
```
data = py.read_csv("uber.csv")
data
```

Out[2]:

	Unnamed: 0	key	fare_amount	pickup_datetime	pickup_longitude	pickup_latitude
0	24238194	2015-05-07 19:52:06	7.5	2015-05-07 19:52:06 UTC	-73.999817	40.738354
1	27835199	2009-07-17 20:04:56	7.7	2009-07-17 20:04:56 UTC	-73.994355	40.728225
2	44984355	2009-08-24 21:45:00	12.9	2009-08-24 21:45:00 UTC	-74.005043	40.740770
3	25894730	2009-06-26 08:22:21	5.3	2009-06-26 08:22:21 UTC	-73.976124	40.790844
4	17610152	2014-08-28 17:47:00	16.0	2014-08-28 17:47:00 UTC	-73.925023	40.744085
...	...	...	...	...	...	...
199995	42598914	2012-10-28 10:49:00	3.0	2012-10-28 10:49:00 UTC	-73.987042	40.739367
199996	16382965	2014-03-14 01:09:00	7.5	2014-03-14 01:09:00 UTC	-73.984722	40.736837
199997	27804658	2009-06-29 00:42:00	30.9	2009-06-29 00:42:00 UTC	-73.986017	40.756487
199998	20259894	2015-05-20 14:56:25	14.5	2015-05-20 14:56:25 UTC	-73.997124	40.725452
199999	11951496	2010-05-15 04:08:00	14.1	2010-05-15 04:08:00 UTC	-73.984395	40.720077

200000 rows × 9 columns

SHAPE

In [3]:
```
np.shape(data)
```

Out[3]:
```
(200000, 9)
```

SIZE

In [4]:
```
np.size(data)
```

Out[4]: 1800000

PRINT FIRST 10 VALUES

In [5]:
```
data.head(10)
```

Out[5]:

	Unnamed: 0	key	fare_amount	pickup_datetime	pickup_longitude	pickup_latitude	drop
0	24238194	2015-05-07 19:52:06	7.5	2015-05-07 19:52:06 UTC	-73.999817	40.738354	
1	27835199	2009-07-17 20:04:56	7.7	2009-07-17 20:04:56 UTC	-73.994355	40.728225	
2	44984355	2009-08-24 21:45:00	12.9	2009-08-24 21:45:00 UTC	-74.005043	40.740770	
3	25894730	2009-06-26 08:22:21	5.3	2009-06-26 08:22:21 UTC	-73.976124	40.790844	
4	17610152	2014-08-28 17:47:00	16.0	2014-08-28 17:47:00 UTC	-73.925023	40.744085	
5	44470845	2011-02-12 02:27:09	4.9	2011-02-12 02:27:09 UTC	-73.969019	40.755910	
6	48725865	2014-10-12 07:04:00	24.5	2014-10-12 07:04:00 UTC	-73.961447	40.693965	
7	44195482	2012-12-11 13:52:00	2.5	2012-12-11 13:52:00 UTC	0.000000	0.000000	
8	15822268	2012-02-17 09:32:00	9.7	2012-02-17 09:32:00 UTC	-73.975187	40.745767	
9	50611056	2012-03-29 19:06:00	12.5	2012-03-29 19:06:00 UTC	-74.001065	40.741787	

PRINT LAST 7 VALUES

In [6]:
```
data.tail(7)
```

Out[6]:

	Unnamed: 0	key	fare_amount	pickup_datetime	pickup_longitude	pickup_latitude
199993	28359558	2012-09-29 19:51:27	9.5	2012-09-29 19:51:27 UTC	-73.987798	40.721210
199994	3189201	2014-01-31 14:42:00	12.0	2014-01-31 14:42:00 UTC	-73.983070	40.760770
199995	42598914	2012-10-28 10:49:00	3.0	2012-10-28 10:49:00 UTC	-73.987042	40.739367
199996	16382965	2014-03-14 01:09:00	7.5	2014-03-14 01:09:00 UTC	-73.984722	40.736837
199997	27804658	2009-06-29 00:42:00	30.9	2009-06-29 00:42:00 UTC	-73.986017	40.756487
199998	20259894	2015-05-20 14:56:25	14.5	2015-05-20 14:56:25 UTC	-73.997124	40.725452
199999	11951496	2010-05-15 04:08:00	14.1	2010-05-15 04:08:00 UTC	-73.984395	40.720077

DESCRIPTION OF TABLE

In [7]:
```
data.describe()
```

Out[7]:

	Unnamed: 0	fare_amount	pickup_longitude	pickup_latitude	dropoff_longitude	dropoff
count	2.000000e+05	200000.000000	200000.000000	200000.000000	199999.000000	19999
mean	2.771250e+07	11.359955	-72.527638	39.935885	-72.525292	3
std	1.601382e+07	9.901776	11.437787	7.720539	13.117408	
min	1.000000e+00	-52.000000	-1340.648410	-74.015515	-3356.666300	-88
25%	1.382535e+07	6.000000	-73.992065	40.734796	-73.991407	4
50%	2.774550e+07	8.500000	-73.981823	40.752592	-73.980093	4
75%	4.155530e+07	12.500000	-73.967153	40.767158	-73.963659	4
max	5.542357e+07	499.000000	57.418457	1644.421482	1153.572603	87

FIND NULL VALUES

In [8]:
```
data.isna()
```

Out[8]:

	Unnamed: 0	key	fare_amount	pickup_datetime	pickup_longitude	pickup_latitude	drop
0	False	False	False	False	False	False	
1	False	False	False	False	False	False	
2	False	False	False	False	False	False	
3	False	False	False	False	False	False	
4	False	False	False	False	False	False	
...	...	...	...	...	...	...	
199995	False	False	False	False	False	False	
199996	False	False	False	False	False	False	
199997	False	False	False	False	False	False	
199998	False	False	False	False	False	False	
199999	False	False	False	False	False	False	

200000 rows × 9 columns

DROP

In [9]:
```
data.dropna()
```

Out[9]:

	Unnamed: 0	key	fare_amount	pickup_datetime	pickup_longitude	pickup_latitude
0	24238194	2015-05-07 19:52:06	7.5	2015-05-07 19:52:06 UTC	-73.999817	40.738354
1	27835199	2009-07-17 20:04:56	7.7	2009-07-17 20:04:56 UTC	-73.994355	40.728225
2	44984355	2009-08-24 21:45:00	12.9	2009-08-24 21:45:00 UTC	-74.005043	40.740770
3	25894730	2009-06-26 08:22:21	5.3	2009-06-26 08:22:21 UTC	-73.976124	40.790844
4	17610152	2014-08-28 17:47:00	16.0	2014-08-28 17:47:00 UTC	-73.925023	40.744085
...	...	...	...	...	...	...
199995	42598914	2012-10-28 10:49:00	3.0	2012-10-28 10:49:00 UTC	-73.987042	40.739367
199996	16382965	2014-03-14 01:09:00	7.5	2014-03-14 01:09:00 UTC	-73.984722	40.736837
199997	27804658	2009-06-29 00:42:00	30.9	2009-06-29 00:42:00 UTC	-73.986017	40.756487
199998	20259894	2015-05-20 14:56:25	14.5	2015-05-20 14:56:25 UTC	-73.997124	40.725452
199999	11951496	2010-05-15 04:08:00	14.1	2010-05-15 04:08:00 UTC	-73.984395	40.720077

199999 rows × 9 columns

In [10]:
```
data.columns
```

Out[10]:
```
Index(['Unnamed: 0', 'key', 'fare_amount', 'pickup_datetime',
       'pickup_longitude', 'pickup_latitude', 'dropoff_longitude',
       'dropoff_latitude', 'passenger_count'],
      dtype='object')
```

In [11]:
```
data.index
```

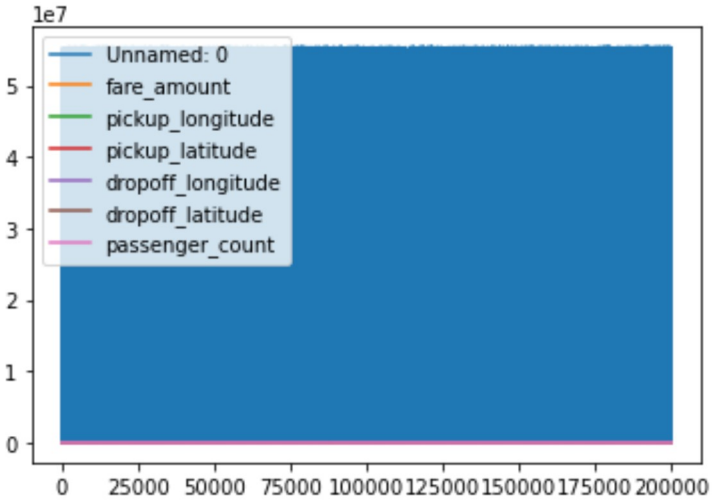
Out[11]:
```
RangeIndex(start=0, stop=200000, step=1)
```

Type *Markdown* and LaTeX: α^2

LINE GRAPH

In [12]:
```
data.plot.line()
```

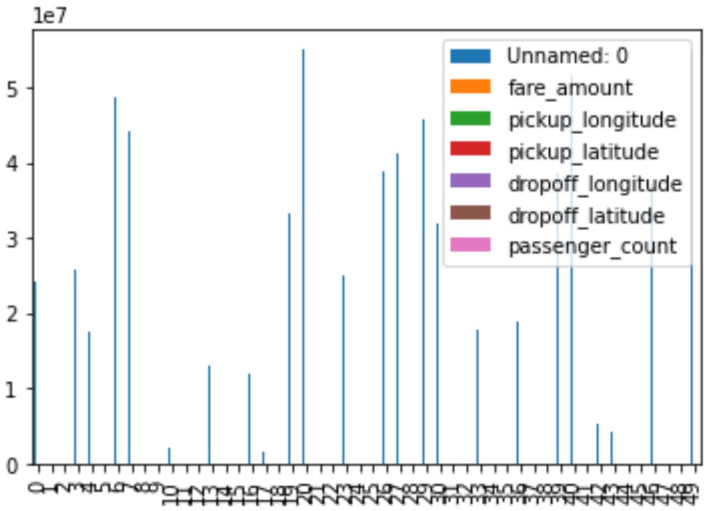
Out[12]: <AxesSubplot:>



BAR PLOT

In [13]:
```
a=data.head(50)
a.plot.bar()
```

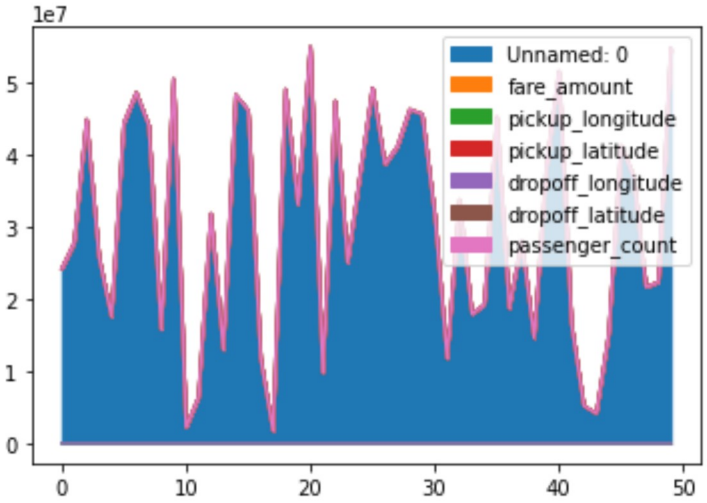
Out[13]: <AxesSubplot:>



AREA CHART

In [20]:
```
a=data.head(50)
```

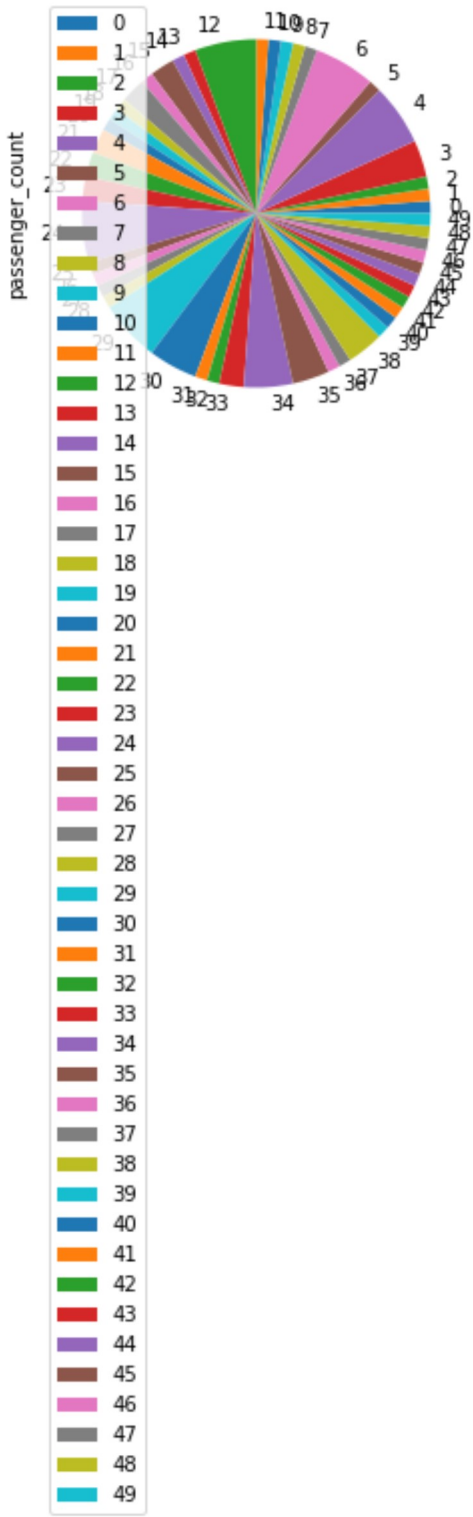
Out[20]: <AxesSubplot:>



PIE CHART

In [19]:
```
a=data.head(50)
```

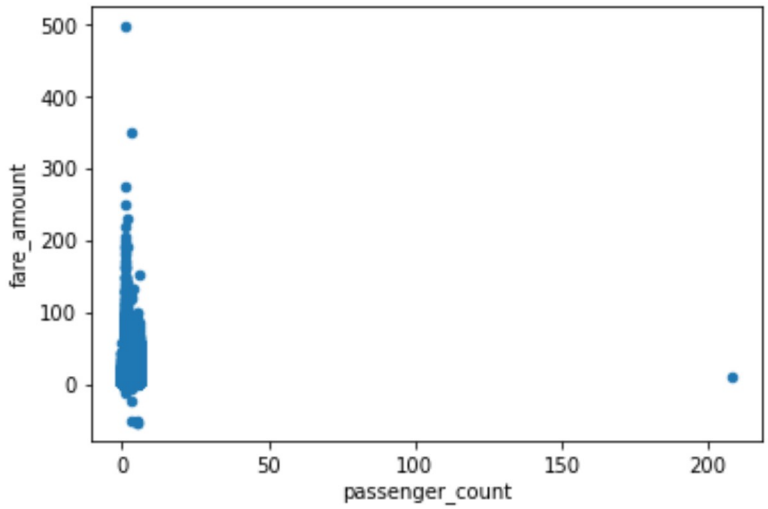
Out[19]: <AxesSubplot:ylabel='passenger_count'>



SCATTER PLOT

In [18]:
```
data.plot.scatter(x ="passenger_count" ,y="fare_amount")
```

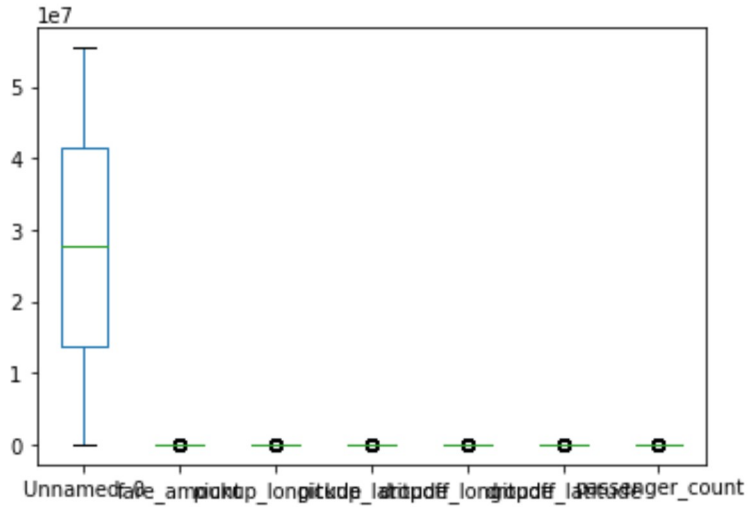
Out[18]: <AxesSubplot:xlabel='passenger_count', ylabel='fare_amount'>



BOX PLOT

In [17]:
```
data.plot.box()
```

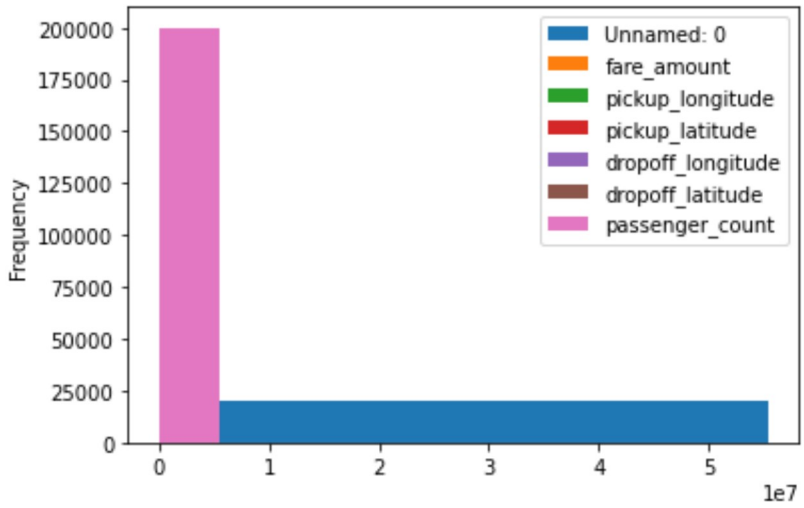
Out[17]: <AxesSubplot:>



HISTO PLOT

In [16]:
```
data.plot.hist()
```

Out[16]: <AxesSubplot:ylabel='Frequency'>



In [ ]:
```

```