In [1]: ```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
```

In [2]: ```
!kaggle datasets download -d "gautamgupta/google-play"
```

In [3]: ```
!ls data.head()
```

In [4]: ```
!ls data.tail()
```

In [5]: ```
!ls data.info()
```

In [6]: ```
!ls data.shape
```

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

In [8]: ```
!ls data.info()
```

In [9]: ```
!ls data.isnull()
```

In [10]: ```
!ls data.isnull().sum()
```

In [11]: ```
!ls data.drop_duplicates()
```

In [12]: ```
!ls data.drop_duplicates().shape
```

In [13]: ```
!ls data.drop_duplicates().isnull().sum()
```

In [14]: ```
!ls data.drop_duplicates()[~(data.duplicate)]
```

In [15]: ```
!ls data.drop_duplicates(inplace=True)
```

In [16]: ```
!ls data.drop_duplicates().shape
```

In [17]: ```
!ls data.isnull().sum()
```

In [18]: ```
!ls data.isnull()
```

In [19]: ```
!ls data.describe()
```

In [20]: ```
!ls data.describe(include=['object'])
```

In [21]: ```
!ls data.describe(include=['int64','float64'])
```

In [22]: ```
!ls data.drop(columns=['rating_count','version'],inplace=True)
```

In [23]: ```
!ls data.isnull().sum()
```

In [24]: ```
def impute_median(series):
    return series.fillna(series.median())
```

In [25]: ```
!ls data.Rating.apply(lambda x: impute_median(x))
```

In [26]: ```
!ls data.Rating = data.Rating.apply(lambda x: impute_median(x))
```

In [27]: ```
!ls data.isnull().sum()
```

In [28]: ```
!ls data.Price.value_counts()
```

In [29]: ```
!ls data.Price = data.Price.apply(lambda x: strip(x).replace('$', '') if x != 0 else x)
```

In [30]: ```
!ls data.Price = data.Price.apply(lambda x: float(x))
```

In [31]: ```
!ls data.Price.dtype
```

In [32]: ```
!ls data.Price.value_counts()
```

In [33]: ```
!ls data.Price.describe()
```

In [34]: ```
!ls data.head()
```

In [35]: ```
!ls data.tail()
```

In [36]: ```
!ls data.info()
```

In [37]: ```
!ls data.shape
```

In [38]: ```
!ls data.describe()
```

In [39]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5]
```

In [40]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.bar(figsize=(15,5))
```

In [41]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.line(figsize=(15,5))
```

In [42]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.area(figsize=(15,5))
```

In [43]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hist(figsize=(15,5))
```

In [44]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.pie(figsize=(15,5))
```

In [45]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.scatter(figsize=(15,5))
```

In [46]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.box(figsize=(15,5))
```

In [47]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [48]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.kde(figsize=(15,5))
```

In [49]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.density(figsize=(15,5))
```

In [50]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [51]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [52]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [53]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [54]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [55]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [56]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [57]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [58]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [59]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [60]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [61]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [62]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [63]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [64]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [65]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [66]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [67]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [68]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [69]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [70]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [71]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [72]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [73]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [74]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [75]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [76]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [77]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [78]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [79]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [80]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [81]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [82]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [83]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [84]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [85]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [86]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [87]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [88]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [89]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [90]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [91]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [92]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [93]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [94]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [95]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [96]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [97]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [98]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [99]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [100]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [101]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [102]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [103]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [104]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [105]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [106]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [107]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [108]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [109]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [110]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [111]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [112]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [113]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [114]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [115]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [116]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [117]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [118]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [119]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [120]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [121]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [122]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [123]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [124]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [125]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [126]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [127]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [128]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [129]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [130]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [131]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [132]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [133]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [134]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [135]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [136]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [137]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [138]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [139]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [140]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [141]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [142]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [143]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [144]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [145]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [146]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [147]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [148]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [149]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [150]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [151]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [152]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [153]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [154]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [155]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [156]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [157]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [158]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [159]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [160]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [161]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [162]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [163]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [164]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [165]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [166]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [167]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [168]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [169]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [170]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [171]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [172]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [173]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [174]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [175]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [176]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [177]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [178]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [179]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [180]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [181]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [182]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [183]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [184]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [185]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [186]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [187]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [188]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [189]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [190]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [191]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [192]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [193]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [194]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [195]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [196]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [197]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [198]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [199]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [200]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [201]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [202]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [203]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [204]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [205]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [206]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [207]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [208]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [209]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [210]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [211]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [212]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [213]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [214]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [215]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [216]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [217]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [218]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
```

In [219]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [220]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [221]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [222]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [223]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=25,figsize=(15,5))
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In [224]: ```
!ls data.groupby('Category').Installs.sum().sort_values(ascending=False)[:5].plot.hexbin(x='Rating',y='Reviews',gridsize=
```