!pip install seaborn Collecting seaborn Downloading seaborn-0.13.2-py3-none-any.whl.metadata (5.4 kB) Requirement already satisfied: numpy!=1.24.0,>=1.20 in c:\users\ sakthivel r\appdata\local\programs\python\python312\lib\site-packages (from seaborn) (1.26.4) Requirement already satisfied: pandas>=1.2 in c:\users\sakthivel r\ appdata\local\programs\python\python312\lib\site-packages (from seaborn) (2.2.3) Requirement already satisfied: matplotlib!=3.6.1,>=3.4 in c:\users\ sakthivel r\appdata\local\programs\python\python312\lib\site-packages (from seaborn) (3.9.2) Requirement already satisfied: contourpy>=1.0.1 in c:\users\sakthivel r\appdata\local\programs\python\python312\lib\site-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (1.3.0) Requirement already satisfied: cycler>=0.10 in c:\users\sakthivel r\ appdata\local\programs\python\python312\lib\site-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (0.12.1) Requirement already satisfied: fonttools>=4.22.0 in c:\users\sakthivel r\appdata\local\programs\python\python312\lib\site-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (4.54.1) Requirement already satisfied: kiwisolver>=1.3.1 in c:\users\sakthivel r\appdata\local\programs\python\python312\lib\site-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (1.4.7) Requirement already satisfied: packaging>=20.0 in c:\users\sakthivel r\appdata\local\programs\python\python312\lib\site-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (23.2) Requirement already satisfied: pillow>=8 in c:\users\sakthivel r\ appdata\local\programs\python\python312\lib\site-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (10.4.0) Requirement already satisfied: pyparsing>=2.3.1 in c:\users\sakthivel r\appdata\local\programs\python\python312\lib\site-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (3.1.4) Requirement already satisfied: python-dateutil>=2.7 in c:\users\ sakthivel r\appdata\local\programs\python\python312\lib\site-packages (from matplotlib!=3.6.1,>=3.4->seaborn) (2.9.0.post0)Requirement already satisfied: pytz>=2020.1 in c:\users\sakthivel r\ appdata\local\programs\python\python312\lib\site-packages (from pandas >= 1.2 - seaborn) (2024.1) Requirement already satisfied: tzdata>=2022.7 in c:\users\sakthivel r\ appdata\local\programs\python\python312\lib\site-packages (from pandas>=1.2->seaborn) (2024.1) Requirement already satisfied: six>=1.5 in c:\users\sakthivel r\ appdata\local\programs\python\python312\lib\site-packages (from python-dateutil>=2.7->matplotlib!=3.6.1,>=3.4->seaborn) (1.16.0) Downloading seaborn-0.13.2-py3-none-any.whl (294 kB) Installing collected packages: seaborn Successfully installed seaborn-0.13.2

```
!pip install squarify
Collecting squarify
  Downloading squarify-0.4.4-py3-none-any.whl.metadata (600 bytes)
Downloading squarify-0.4.4-py3-none-any.whl (4.1 kB)
Installing collected packages: squarify
Successfully installed squarify-0.4.4
!pip install plotly
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
color = sns.color palette()
import squarify
import plotly.offline as py
py.init notebook mode(connected=True)
import plotly.graph objs as go
%matplotlib inline
pd.options.mode.chained assignment = None
funding data = pd.read csv(r"E:\powerbi\project\startup funding\
archive\startup funding.csv")
funding data.head()
   SNo
                                   IndustryVertical \
              Date
                     StartupName
0
     0
       01/08/2017
                        TouchKin
                                         Technology
1
                                         Technology
     1 02/08/2017
                         Ethinos
2
                    Leverage Edu Consumer Internet
     2 02/08/2017
3
     3 02/08/2017
                            Zepo Consumer Internet
4
     4 02/08/2017 Click2Clinic Consumer Internet
                                     SubVertical CityLocation \
                        Predictive Care Platform
0
                                                    Bangalore
                        Digital Marketing Agency
1
                                                       Mumbai
2
   Online platform for Higher Education Services
                                                    New Delhi
3
                          DIY Ecommerce platform
                                                       Mumbai
4
                   healthcare service aggregator
                                                    Hyderabad
                                       InvestorsName
InvestmentType \
0
                                         Kae Capital Private Equity
                          Triton Investment Advisors Private Equity
1
2 Kashyap Deorah, Anand Sankeshwar, Deepak Jain,... Seed Funding
3 Kunal Shah, LetsVenture, Anupam Mittal, Hetal ... Seed Funding
```

```
4
                      Narottam Thudi, Shireesh Palle
                                                         Seed Funding
  AmountInUSD Remarks
0
    1,300,000
                  NaN
1
                  NaN
          NaN
2
          NaN
                  NaN
3
      500,000
                  NaN
4
      850,000
                  NaN
funding data.columns
Index(['SNo', 'Date', 'StartupName', 'IndustryVertical',
'SubVertical',
       'CityLocation', 'InvestorsName', 'InvestmentType',
'AmountInUSD',
       'Remarks'],
      dtype='object')
print("Size of data (Rows, Columns):", funding data.shape)
Size of data (Rows, Columns): (2372, 10)
total = funding_data.isnull().sum().sort_values(ascending = False)
percent =
((funding data.isnull().sum()/funding data.isnull().count())*100).sort
values(ascending = False)
missing data = pd.concat([total, percent], axis=1, keys=['Total',
'Percent %'1)
missing data.head()
                  Total
                         Percent %
Remarks
                   1953
                         82.335582
SubVertical
                    936
                         39.460371
AmountInUSD
                    847
                         35.708263
CityLocation
                    179
                          7.546374
IndustryVertical
                          7.209106
                    171
funding data
       SNo
                  Date
                              StartupName
                                            IndustryVertical \
0
         0
            01/08/2017
                                 TouchKin
                                                   Technology
1
         1
            02/08/2017
                                  Ethinos
                                                   Technology
2
         2
            02/08/2017
                             Leverage Edu
                                           Consumer Internet
3
            02/08/2017
                                           Consumer Internet
         3
                                     Zepo
4
                                           Consumer Internet
         4
            02/08/2017
                             Click2Clinic
. . .
      2367
            29/01/2015
                               Printvenue
                                                          NaN
2367
2368
      2368
            29/01/2015
                                 Graphene
                                                          NaN
2369
      2369
            30/01/2015
                          Mad Street Den
                                                          NaN
2370
      2370
           30/01/2015
                                Simplotel
                                                          NaN
```

2371	2371 31/01/201	5 couponmachine.in	NaN					
0 1 2 3 4 2367 2368 2369 2370		•	Mumbai New Delhi Mumbai Hyderabad NaN NaN					
2371		NaN	NaN					
InvestorsName								
Invest 0	tmentType \	Kae Cap	ital Private					
Equity	/	Triton Investment Advi	sors Private					
Equity								
2 Fundir		Anand Sankeshwar, Deepak Jain	, Seed					
3 Fundir		sVenture, Anupam Mittal, Hetal	Seed					
4		Narottam Thudi, Shireesh P	alle Seed					
Fundir	ng							
2367		Asia Pacific Internet G	roup Private					
Equity 2368	/	KARSEMVEN	•					
Equity	/							
2369 Equity	/	Exfinity Fund, GrowX Ventu	res. Private					
2370		MakeMy	Trip Private					
Equity 2371		UK based Group of Angel Inves	tors Seed					
Fundir	ng							
0 1 2 3 4	AmountInUSD 1,300,000 NaN NaN 500,000 850,000	Remarks NaN NaN NaN NaN NaN						
2367 2368 2369	4,500,000 825,000 1,500,000	NaN Govt backed VC Fund NaN						

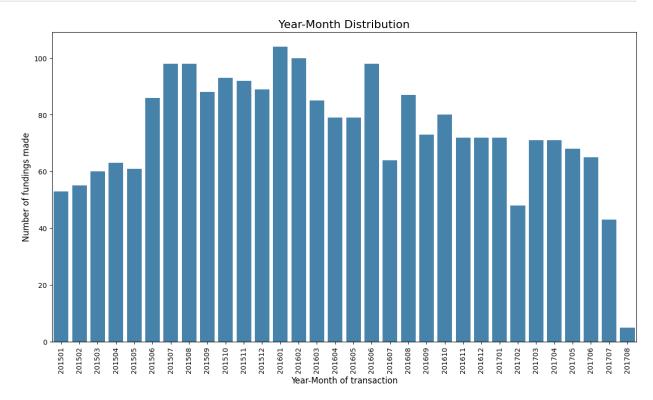
```
2370
                  Strategic Funding, Minority stake
             NaN
         140,000
2371
                                                 NaN
[2372 rows \times 10 columns]
del funding data["Remarks"]
funding data.head()
   SNo
                     StartupName
              Date
                                   IndustryVertical \
0
     0
        01/08/2017
                        TouchKin
                                          Technology
1
     1
        02/08/2017
                         Ethinos
                                          Technology
2
     2
        02/08/2017
                    Leverage Edu
                                  Consumer Internet
3
     3 02/08/2017
                            Zepo Consumer Internet
4
     4 02/08/2017
                    Click2Clinic Consumer Internet
                                      SubVertical CityLocation \
0
                        Predictive Care Platform
                                                     Bangalore
1
                        Digital Marketing Agency
                                                        Mumbai
2
   Online platform for Higher Education Services
                                                     New Delhi
3
                          DIY Ecommerce platform
                                                        Mumbai
                   healthcare service aggregator
4
                                                     Hyderabad
                                        InvestorsName
InvestmentType
                                          Kae Capital Private Equity
0
                          Triton Investment Advisors Private Equity
1
   Kashyap Deorah, Anand Sankeshwar, Deepak Jain,... Seed Funding
  Kunal Shah, LetsVenture, Anupam Mittal, Hetal ... Seed Funding
4
                      Narottam Thudi, Shireesh Palle
                                                         Seed Funding
  AmountInUSD
    1,300,000
0
          NaN
1
2
          NaN
3
      500,000
4
      850,000
funding_data["AmountInUSD"] = funding_data["AmountInUSD"].apply(lambda
x: float(str(x).replace(",","")))
funding data
       SNo
                                            IndustryVertical \
                  Date
                             StartupName
0
         0
            01/08/2017
                                TouchKin
                                                  Technology
1
         1
            02/08/2017
                                 Ethinos
                                                  Technology
2
                                          Consumer Internet
            02/08/2017
                            Leverage Edu
```

3 4	3 4	02/08/2017 02/08/2017	Zepo Click2Clinic	Consumer Inte				
2367 2368 2369 2370 2371	2367 2368 2369 2370 2371	29/01/2015 29/01/2015 30/01/2015 30/01/2015 31/01/2015	Printvenue Graphene Mad Street Den Simplotel couponmachine.in		NaN NaN NaN NaN NaN			
0 1 2 3 4	Onlin	•	S Predictive Car Digital Market or Higher Educatio DIY Ecommerc ealthcare service	ing Agency n Services e platform aggregator 	Bangalore Mumbai New Delhi Mumbai Hyderabad			
2367 2368 2369 2370 2371				NaN NaN NaN NaN NaN	NaN NaN NaN NaN NaN			
<pre>InvestmentType \</pre>								
o 0	tmenti	ype \		Kae Capital	Private			
Equit	у			·				
1 Triton Investment Advisors Private Equity								
2 Kashyap Deorah, Anand Sankeshwar, Deepak Jain, Seed Funding								
3 Kunal Shah, LetsVenture, Anupam Mittal, Hetal Seed								
Funding 4 Narottam Thudi, Shireesh Palle Seed								
Funding								
				• • •				
2367			Asia Pacific	Internet Group	Private			
Equit 2368	У			KARSEMVEN Fund	Private			
Equit	у			KAKSEMVEN FUM	FIIVate			
2369			Exfinity Fund, G	rowX Ventures.	Private			
Equit 2370	У			MakeMyTrip	Private			
Equit	у	1.00	. h		Caral			
2371 Fundi	na	UK	C based Group of A	nget investors	Seed			
0		tInUSD 0000.0						
1	150	NaN						

```
2
              NaN
3
         500000.0
4
         850000.0
2367
        4500000.0
2368
         825000.0
2369
        1500000.0
2370
               NaN
         140000.0
2371
[2372 rows x \ 9 \ columns]
funding data["AmountInUSD"] =
pd.to numeric(funding data["AmountInUSD"])
funding_data
       SNo
                               StartupName
                                              IndustryVertical \
                   Date
0
            01/08/2017
                                  TouchKin
                                                    Technology
         0
1
                                                    Technology
         1
            02/08/2017
                                   Ethinos
2
         2
            02/08/2017
                              Leverage Edu
                                            Consumer Internet
3
         3
                                             Consumer Internet
            02/08/2017
                                      Zepo
4
            02/08/2017
         4
                              Click2Clinic
                                             Consumer Internet
                                Printvenue
2367
      2367
            29/01/2015
                                                            NaN
2368
      2368
            29/01/2015
                                  Graphene
                                                            NaN
2369
                           Mad Street Den
      2369
            30/01/2015
                                                            NaN
2370
      2370
            30/01/2015
                                 Simplotel
                                                            NaN
2371
      2371
            31/01/2015
                         couponmachine.in
                                                            NaN
                                           SubVertical CityLocation
0
                             Predictive Care Platform
                                                           Bangalore
1
                             Digital Marketing Agency
                                                              Mumbai
2
      Online platform for Higher Education Services
                                                           New Delhi
3
                               DIY Ecommerce platform
                                                              Mumbai
4
                       healthcare service aggregator
                                                           Hyderabad
2367
                                                   NaN
                                                                 NaN
2368
                                                   NaN
                                                                 NaN
2369
                                                   NaN
                                                                 NaN
2370
                                                   NaN
                                                                 NaN
                                                   NaN
2371
                                                                 NaN
                                             InvestorsName
InvestmentType
                                               Kae Capital
                                                             Private
Equity
                               Triton Investment Advisors
                                                            Private
Equity
      Kashyap Deorah, Anand Sankeshwar, Deepak Jain,...
                                                               Seed
```

```
Funding
      Kunal Shah, LetsVenture, Anupam Mittal, Hetal ...
                                                            Seed
3
Funding
                         Narottam Thudi, Shireesh Palle
                                                            Seed
Funding
. . .
2367
                            Asia Pacific Internet Group Private
Equity
2368
                                          KARSEMVEN Fund Private
Equity
2369
                         Exfinity Fund, GrowX Ventures.
                                                          Private
Equity
2370
                                              MakeMyTrip Private
Equity
                      UK based Group of Angel Investors
2371
                                                            Seed
Funding
      AmountInUSD
0
        1300000.0
1
              NaN
2
              NaN
3
         500000.0
4
         850000.0
        4500000.0
2367
         825000.0
2368
2369
        1500000.0
2370
              NaN
2371
         140000.0
[2372 rows x \ 9 \ columns]
funding data.loc[funding data['Date'] == '12/05.2015', 'Date'] =
'12/05/2015'
funding data.loc[funding data['Date'] == '13/04.2015', 'Date'] =
'13/04/2015'
funding data.loc[funding data['Date'] == '15/01.2015', 'Date'] =
'15/01/2015'
funding data.loc[funding data['Date'] == '22/01//2015', 'Date'] =
'22/01/2015'
funding data["yearmonth"] = (pd.to datetime(funding data['Date'],
format='%d/%m/%Y').dt.year * 100) + \
                              (pd.to datetime(funding data['Date'],
format='%d/%m/%Y').dt.month)
temp =
funding data['yearmonth'].value counts().sort values(ascending=False).
head (10)
print("Number of funding per month in decreasing order (Top 10)\n",
```

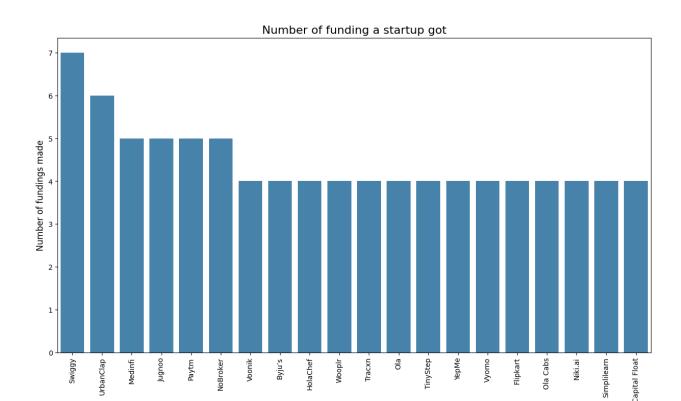
```
temp)
year month = funding data['yearmonth'].value counts()
plt.figure(figsize=(15, 8))
sns.barplot(x=year month.index, y=year month.values, alpha=0.9,
color=color[0]) # Use x= and y= parameters
plt.xticks(rotation='vertical')
plt.xlabel('Year-Month of transaction', fontsize=12)
plt.ylabel('Number of fundings made', fontsize=12)
plt.title("Year-Month Distribution", fontsize=16)
plt.show()
Number of funding per month in decreasing order (Top 10)
yearmonth
201601
           104
           100
201602
201606
            98
201507
            98
201508
            98
201510
            93
201511
            92
            89
201512
201509
            88
201608
            87
Name: count, dtype: int64
```



```
print("Maximum funding to a Startups is :
",funding data["AmountInUSD"].dropna().sort values().max())
Maximum funding to a Startups is : 1400000000.0
funding data[funding data.AmountInUSD == 14000000000.0]
                Date StartupName IndustryVertical \
     SNo
                           Paytm
158
     158
          18/05/2017
                                        ECommerce
         21/03/2017
294
     294
                        Flipkart
                                        eCommerce
                            SubVertical CityLocation \
158
     Mobile Wallet & ECommerce platform
                                           Bangalore
294
                  ECommerce Marketplace
                                           Bangalore
                         InvestorsName InvestmentType
AmountInUSD
158
                        SoftBank Group Private Equity 1.400000e+09
294 Microsoft, eBay, Tencent Holdings Private Equity 1.400000e+09
     yearmonth
158
        201705
        201703
294
funding data[funding data.StartupName == 'Paytm']
       SNo
                  Date StartupName
IndustryVertical
158
       158 18/05/2017
                                                           ECommerce
                             Paytm
821
       821
             30/8/2016
                             Paytm
                                                           eCommerce
                                    E-Commerce & M-Commerce platform
1787 1787
          29/09/2015
                             Paytm
2218
     2218
            13/03/2015
                             Paytm
                                                                  NaN
2276 2276
            05/02/2015
                             Paytm
                                                                 NaN
                             SubVertical CityLocation \
158
     Mobile Wallet & ECommerce platform
                                            Bangalore
821
     Mobile Wallet & ECommerce platform
                                            Bangalore
                                            New Delhi
1787
                                     NaN
2218
                                     NaN
                                                  NaN
2276
                                     NaN
                                                  NaN
                        InvestorsName InvestmentType
                                                        AmountInUSD
yearmonth
158
                       SoftBank Group Private Equity 1.400000e+09
```

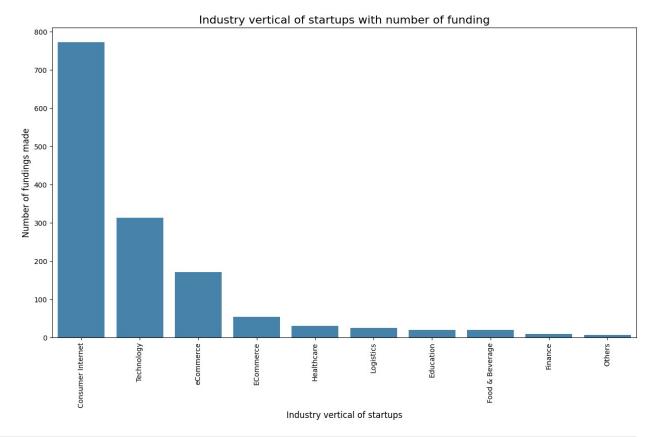
```
201705
                        MediaTek Inc. Private Equity 6.000000e+07
821
201608
         Alibaba Group, Ant Financial Private Equity 6.800000e+08
1787
201509
2218
                           Ratan Tata Private Equity
                                                                NaN
201503
2276 Ant Financial Services (Alipay) Private Equity
                                                                NaN
201502
print("Minimum funding to a Startups is :
,funding data["AmountInUSD"].dropna().sort values().min())
Minimum funding to a Startups is: 16000.0
funding data[funding data.AmountInUSD == 16000.0]
       SNo
                  Date
                            StartupName IndustryVertical
SubVertical
            \
2345 2345 19/01/2015
                           Hostel Dunia
                                                                 NaN
                                                     NaN
2346 2346
            19/01/2015
                        Play your sport
                                                     NaN
                                                                 NaN
2347 2347
            19/01/2015
                                Yo Grad
                                                     NaN
                                                                 NaN
2348 2348
           19/01/2015
                                 Enabli
                                                     NaN
                                                                 NaN
                                                                 NaN
2349 2349 19/01/2015
                                    CBS
                                                     NaN
     CityLocation
                                                InvestorsName
InvestmentType
                   Hyderabad Angels (at Startup Heroes event)
2345
              NaN
                                                                Seed
Funding
2346
                   Hyderabad Angels (at Startup Heroes event)
              NaN
                                                                Seed
Funding
                   Hyderabad Angels (at Startup Heroes event)
2347
              NaN
                                                                Seed
Funding
                   Hyderabad Angels (at Startup Heroes event)
2348
              NaN
                                                                Seed
Funding
                   Hyderabad Angels (at Startup Heroes event)
2349
              NaN
                                                                Seed
Funding
      AmountInUSD
                   yearmonth
2345
                      201501
          16000.0
2346
                      201501
          16000.0
2347
          16000.0
                      201501
2348
          16000.0
                      201501
2349
          16000.0
                      201501
```

```
print("Average indian startups got funding of :
",funding data["AmountInUSD"].dropna().sort values().mean())
Average indian startups got funding of: 12031073.099016393
print("Total startups funded : ",
len(funding data["StartupName"].unique()))
print(funding data["StartupName"].value counts().head(10))
startupname = funding_data['StartupName'].value_counts().head(20)
Total startups funded: 2001
StartupName
Swiggy
             7
UrbanClap
             6
             5
Medinfi
             5
Jugnoo
             5
Paytm
             5
NoBroker
             4
Voonik
             4
Byju's
HolaChef
             4
Wooplr
             4
Name: count, dtype: int64
plt.figure(figsize=(15,8))
sns.barplot(x=startupname.index, y=startupname.values, alpha=0.9,
color=color[0])
plt.xticks(rotation='vertical')
plt.xlabel('Startup Name', fontsize=12)
plt.ylabel('Number of fundings made', fontsize=12)
plt.title("Number of funding a startup got", fontsize=16)
plt.show()
```

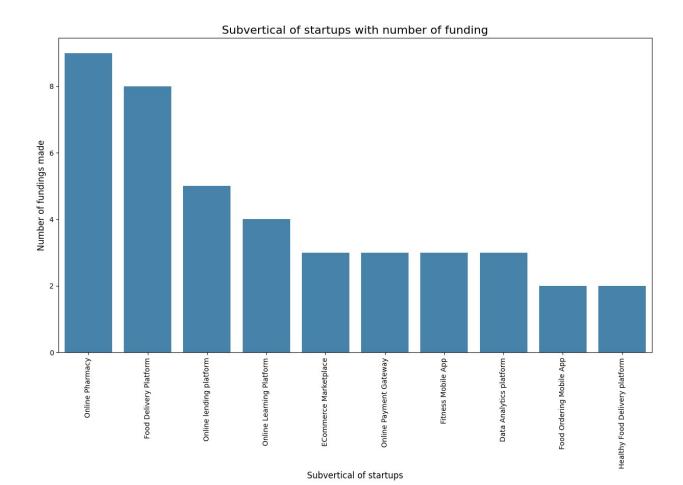


Startup Name

```
industry = funding data['IndustryVertical'].value_counts().head(10)
print(industry)
IndustryVertical
Consumer Internet
                     772
                     313
Technology
eCommerce
                     171
                      53
ECommerce
                      30
Healthcare
                      24
Logistics
                      20
Education
Food & Beverage
                      19
Finance
                       9
0thers
                       6
Name: count, dtype: int64
plt.figure(figsize=(15,8))
sns.barplot(x=industry.index, y=industry.values, alpha=0.9,
color=color[0])
plt.xticks(rotation='vertical')
plt.xlabel('Industry vertical of startups', fontsize=12)
plt.ylabel('Number of fundings made', fontsize=12)
plt.title("Industry vertical of startups with number of funding",
fontsize=16)
plt.show()
```



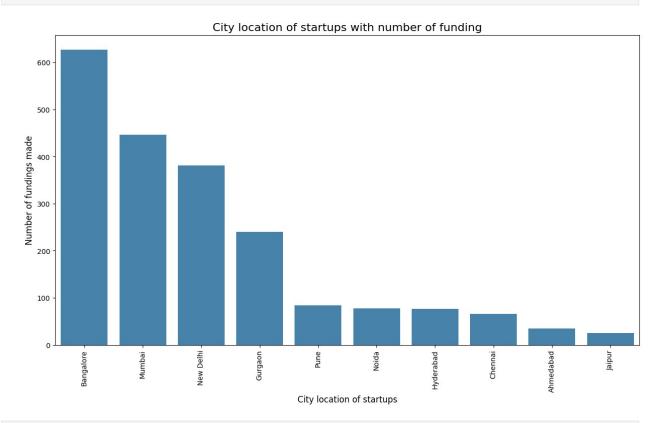
```
industry = funding data['SubVertical'].value counts().head(10)
print(industry)
plt.figure(figsize=(15,8))
sns.barplot(x=industry.index, y=industry.values, alpha=0.9,
color=color[0])
plt.xticks(rotation='vertical')
plt.xlabel('Subvertical of startups', fontsize=12)
plt.ylabel('Number of fundings made', fontsize=12)
plt.title("Subvertical of startups with number of funding",
fontsize=16)
plt.show()
SubVertical
Online Pharmacy
                                      9
                                      8
Food Delivery Platform
                                      5
4
3
3
3
2
Online lending platform
Online Learning Platform
ECommerce Marketplace
Online Payment Gateway
Fitness Mobile App
Data Analytics platform
Food Ordering Mobile App
Healthy Food Delivery platform
Name: count, dtype: int64
```



```
city = funding data['CityLocation'].value counts().head(10)
print(city)
plt.figure(figsize=(15,8))
sns.barplot(x=city.index, y=city.values, alpha=0.9, color=color[0])
plt.xticks(rotation='vertical')
plt.xlabel('City location of startups', fontsize=12)
plt.ylabel('Number of fundings made', fontsize=12)
plt.title("City location of startups with number of funding",
fontsize=16)
plt.show()
CityLocation
Bangalore
             627
Mumbai
             446
             381
New Delhi
Gurgaon
             240
Pune
              84
Noida
              78
Hyderabad
              76
Chennai
              66
Ahmedabad
              35
```

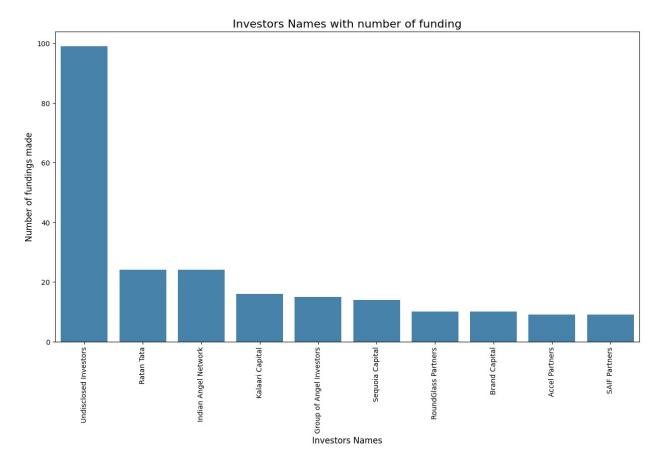
Jaipur 25

Name: count, dtype: int64



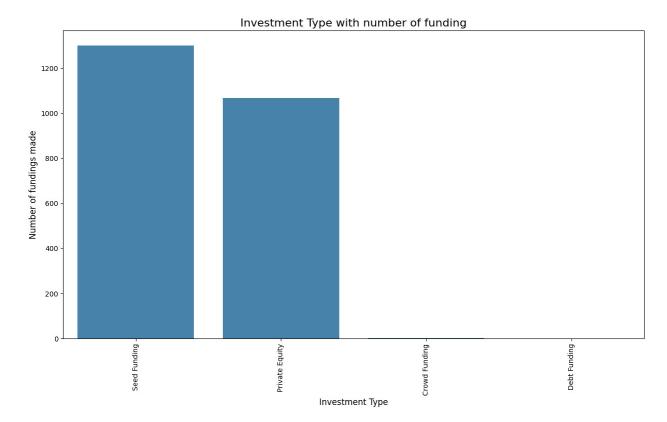
```
investors = funding data['InvestorsName'].value counts().head(10)
print(investors)
InvestorsName
Undisclosed Investors
                             33
                             27
Undisclosed investors
Ratan Tata
                             24
Indian Angel Network
                             24
Kalaari Capital
                             16
Group of Angel Investors
                             15
Seguoia Capital
                             14
undisclosed investors
                             11
Brand Capital
                             10
Undisclosed Investor
                             10
Name: count, dtype: int64
funding data['InvestorsName'] = funding data['InvestorsName'].replace(
    ['Undisclosed Investors', 'Undisclosed investors', 'undisclosed
investors', 'Undisclosed Investor', 'Undisclosed
investor','Undisclosed'],
    'Undisclosed Investors'
)
```

```
investors = funding data['InvestorsName'].value counts().head(10)
print(investors)
InvestorsName
Undisclosed Investors
                            99
                            24
Ratan Tata
Indian Angel Network
                            24
Kalaari Capital
                            16
Group of Angel Investors
                            15
Sequoia Capital
                            14
RoundGlass Partners
                            10
Brand Capital
                            10
Accel Partners
                             9
SAIF Partners
                             9
Name: count, dtype: int64
plt.figure(figsize=(15,8))
sns.barplot(x=investors.index, y=investors.values, alpha=0.9,
color=color[0])
plt.xticks(rotation='vertical')
plt.xlabel('Investors Names', fontsize=12)
plt.ylabel('Number of fundings made', fontsize=12)
plt.title("Investors Names with number of funding", fontsize=16)
plt.show()
```



```
investment = funding data['InvestmentType'].value counts()
investment
InvestmentType
Seed Funding
                  1271
Private Equity
                  1066
                    30
SeedFunding
Debt Funding
                     1
PrivateEquity
                     1
                     1
Crowd funding
Crowd Funding
Name: count, dtype: int64
funding data['InvestmentType'] =
funding_data['InvestmentType'].replace(
    ['SeedFunding', 'Seed Funding'], 'Seed Funding')
funding_data['InvestmentType'] =
funding_data['InvestmentType'].replace(
    ['PrivateEquity', 'Private Equity'], 'Private Equity')
funding data['InvestmentType'] =
funding_data['InvestmentType'].replace(
    ['Crowd funding', 'Crowd Funding'], 'Crowd Funding')
```

```
investment type = funding data['InvestmentType'].value counts()
print(investment type)
InvestmentType
Seed Funding
                  1301
Private Equity
                  1067
Crowd Funding
                     2
Debt Funding
                     1
Name: count, dtype: int64
investment = funding data['InvestmentType'].value counts()
print(investment)
plt.figure(figsize=(15,8))
sns.barplot(x=investment.index, y=investment.values, alpha=0.9,
color=color[0])
plt.xticks(rotation='vertical')
plt.xlabel('Investment Type', fontsize=12)
plt.ylabel('Number of fundings made', fontsize=12)
plt.title("Investment Type with number of funding", fontsize=16)
plt.show()
InvestmentType
Seed Funding
                  1301
Private Equity
                  1067
Crowd Funding
                     2
Debt Funding
                     1
Name: count, dtype: int64
```



```
temp = funding_data["InvestmentType"].value_counts()
labels = temp.index
sizes = (temp / temp.sum())*100
trace = go.Pie(labels=labels, values=sizes, hoverinfo='label+percent')
layout = go.Layout(title='Types of investment funding with %')
fig = go.Figure(data=data, layout=layout)
py.iplot(fig, filename="BorrowerGender")
```

Types of investment funding with %



```
# Exporting DataFrame to Excel
output_path = "funding_data_output.xlsx" # Specify your output file
path
```

```
funding_data.to_excel(output_path, index=False) # Set index=False to
exclude the DataFrame index

print(f"DataFrame exported successfully to {output_path}")
DataFrame exported successfully to funding_data_output.xlsx
```