CASE STUDY

Unveiling Destinations of Affection: A Comprehensive Survey on Favorite Places

Introduction:

We're exploring what makes certain places special to people through a simple survey. We asked people about their favorite places, who they like to go with, why they love it, how often they go, how far it is, what activities they recommend, and one word that captures how they feel there. This study aims to find out not just where people love to spend their time, but also what makes these places so special to them. By looking at their answers, we hope to see patterns that show us why some places are loved more than others. This could help us understand what makes a place not just a location, but a favorite destination.

Abstract:

This study delves into the preferences and emotional connections people have with their favorite places. Through a structured survey, we gathered insights on preferred destinations, accompanying companions, reasons for affinity, visitation frequency, distance from home, recommended activities, and emotive descriptors. This research contributes to a deeper understanding of spatial preferences, offering valuable perspectives for urban planning, tourism, and community development.

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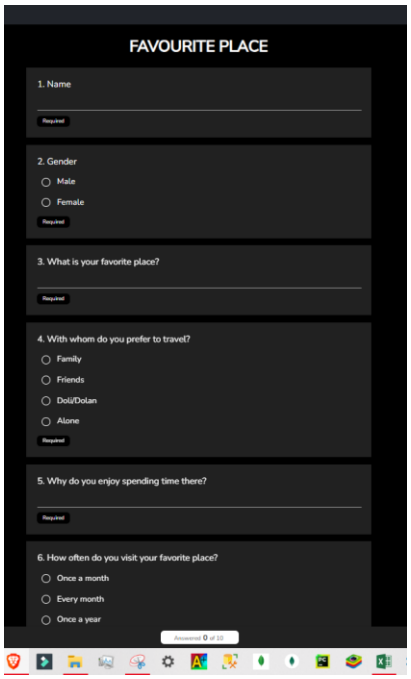
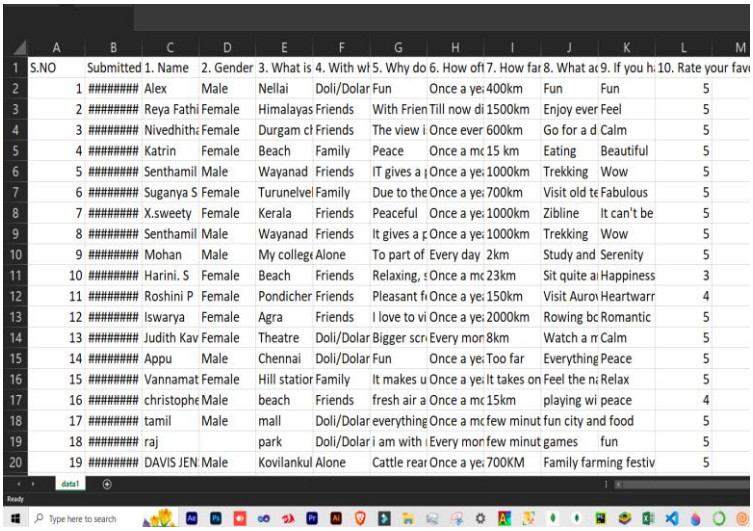
Data Collection:

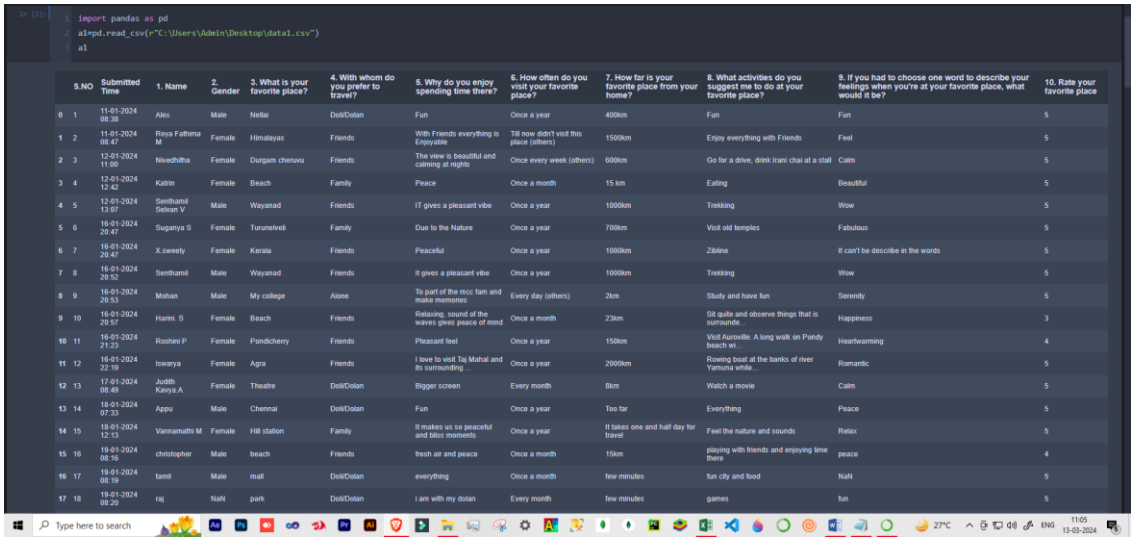
To collect data on favorite places, a structured survey was designed using Google Forms. The survey comprised several questions aimed at understanding individuals' preferences, behaviors, and emotional connections to their favorite places. The survey questions covered various aspects, including the name of the favorite place, preferred travel companions, reasons for enjoyment, visitation frequency, distance from home, recommended activities, and emotive descriptors.





S.NO	Submitted	1. Name	2. Gender	3. What is	4. With wh	5. Why do	6. How oft	7. How far	8. What ac	9. If you h	10. Rate your fav
1	########	Alex	Male	Nellai	Doli/Dolar	Fun	Once a ye	400km	Fun	Fun	5
2	########	Reya Fathi	Female	Himalayas	Friends	With Frien	Till now di	1500km	Enjoy ever	Feel	5
3	########	Nivedhith	Female	Durgam cl	Friends	The view i	Once ever	600km	Go for a d	Calm	5
4	########	Katrin	Female	Beach	Family	Peace	Once a mo	15 km	Eating	Beautiful	5
5	########	Senthamil	Male	Wayanad	Friends	IT gives a	Once a ye	1000km	Trekking	Wow	5
6	########	Suganya S	Female	Turunelvel	Family	Due to the	Once a ye	700km	Visit old te	Fabulous	5
7	########	X.sweety	Female	Kerala	Friends	Peaceful	Once a ye	1000km	Zibline	It can't be	5
8	########	Senthamil	Male	Wayanad	Friends	It gives a	Once a ye	1000km	Trekking	Wow	5
9	########	Mohan	Male	My college	Alone	To part of	Every day	2km	Study and	Serenity	5
10	########	Harini. S	Female	Beach	Friends	Relaxing,	Once a mo	23km	Sit quite a	Happiness	3
11	########	Roshini P	Female	Pondicher	Friends	Pleasant fa	Once a ye	150km	Visit Auro	Heartwarr	4
12	########	Iswarya	Female	Agra	Friends	I love to vi	Once a ye	2000km	Rowing bc	Romantic	5
13	########	Judith Kav	Female	Theatre	Doli/Dolar	Bigger scr	Every mon	8km	Watch a m	Calm	5
14	########	Appu	Male	Chennai	Doli/Dolar	Fun	Once a ye	Too far	Everything	Peace	5
15	########	Vannamat	Female	Hill statior	Family	It makes u	Once a ye	It takes on	Feel the na	Relax	5
16	########	christophe	Male	beach	Friends	fresh air a	Once a mo	15km	playing wi	peace	4
17	########	tamil	Male	mall	Doli/Dolar	everything	Once a mo	few minut	fun city and	food	5
18	########	raj		park	Doli/Dolar	i am with	Every mon	few minut	games	fun	5
19	########	DAVIS JEN	Male	Kovilankul	Alone	Cattle rear	Once a ye	700KM	Family farming	festiv	5

Importing Dataset with Pandas in Python:



```
import pandas as pd
a1=pd.read_csv(r"C:\Users\Admin\Desktop\data1.csv")
a1
```

	S.NO	Submitted Time	1. Name	2. Gender	3. What is your favorite place?	4. With whom do you prefer to travel?	5. Why do you enjoy spending time there?	6. How often do you visit your favorite place?	7. How far is your favorite place from your home?	8. What activities do you suggest me to do at your favorite place?	9. If you had to choose one word to describe your feelings when you're at your favorite place, what would it be?	10. Rate your favorite place
0	1	11-01-2024 08:38	Alex	Male	Nellai	Doli/Dolan	Fun	Once a year	400km	Fun	Fun	5
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2	3	12-01-2024 11:00	Nivedhitha	Female	Durgam cheruvu	Friends	The view is beautiful and calming at nights	Once every week (others)	600km	Go for a drive, drink Irani chai at a stall	Calm	5
3	4	12-01-2024 12:42	Katrin	Female	Beach	Family	Peace	Once a month	15 km	Eating	Beautiful	5
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8	9	16-01-2024 20:53	Mohan	Male	My college	Alone	To part of the mcc fam and make memories	Every day (others)	2km	Study and have fun	Serenity	5
9	10	16-01-2024 20:57	Harini. S	Female	Beach	Friends	Relaxing, sound of the waves gives peace of mind	Once a month	23km	Sit quite and observe things that is surrounde...	Happiness	3
10	11	16-01-2024 21:23	Roshini P	Female	Pondicherry	Friends	Pleasant feel	Once a year	150km	Visit Auroville. A long walk on Pondy beach wi...	Heartwarming	4
11	12	16-01-2024 22:19	Iswarya	Female	Agra	Friends	I love to visit Taj Mahal and its surrounding ...	Once a year	2000km	Rowing boat at the banks of river Yamuna while...	Romantic	5
12	13	17-01-2024 08:49	Judith Kavya.A	Female	Theatre	Doli/Dolan	Bigger screen	Every month	8km	Watch a movie	Calm	5
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14	15	18-01-2024 12:13	Vannamathi M	Female	Hill station	Family	It makes us so peaceful and bliss moments	Once a year	It takes one and half day for travel	Feel the nature and sounds	Relax	5
15	16	19-01-2024 08:16	christopher	Male	beach	Friends	fresh air and peace	Once a month	15km	playing with friends and enjoying time there	peace	4
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Data Cleaning:

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- ### Handling Missing Values:
  The initial dataset obtained from the survey responses contained missing values, which needed to be addressed to ensure the integrity and accuracy of the analysis. The dropna() function from the pandas library was employed to eliminate rows with missing values across the dataset.
- ### Removing Unused Columns:
  Upon reviewing the dataset, it was observed that the column labeled "User Form Submitted Time" did not provide relevant information for the analysis and could be excluded from further processing using drop() function.

```
a2=a1.drop("Submitted Time",axis="columns")
a2
```

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Checking for null values using isnull():

```
a22=a2.isnull()
a22
```

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0	False	False	False	False	False	False	False	False	False	False	False
1	False	False	False	False	False	False	False	False	False	False	False
2	False	False	False	False	False	False	False	False	False	False	False
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14	False	False	False	False	False	False	False	False	False	False	False
15	False	False	False	False	False	False	False	False	False	False	False
16	False	False	False	False	False	False	False	False	False	True	False
17	False	False	True	False	False	False	False	False	False	False	False
18	False	False	False	False	False	False	False	False	False	True	False

Cleaned data after using dropna():

```
a3=a1.dropna()
a3
```

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Data Integration:

"Data Integration" section of my case study, focusing on Python code to integrate and preprocess the data, specifically for the question "7. How far is your favorite place from your home?" by removing string characters and leaving only the integer data

```
list1=[]
list2=[]
for x in a1["7. How far is your favorite place from your home?"]:
    list1.append(x)
for y in list1:
    if "km" in y:
        s=y.replace("km","")
        t=int(s)
        list2.append(t)
print(list2)
```

```
[400, 1500, 600, 15, 1000, 700, 1000, 1000, 2, 23, 150, 2000, 8, 15]
```

Data Transformation:

The survey question "6. How often do you visit your favorite place?" contained categorical data representing different frequencies of visitation (once a year, once a month, every month). To analyze and understand the distribution of visitation frequencies, Python code was used to transform the data by categorizing occurrences of each common visitation frequency and displaying them as a list which provides a solution for better way of visualization.

```
list3=[]
list4=[]
for z in a1["6. How often do you visit your favorite place?"]:
    list3.append(z)
for w in list3:
    if "(others)" not in w:
        list4.append(w)
print(list4)
```

```
['Once a year', 'Once a month', 'Once a year', 'Once a year', 'Once a year', 'Once a year', 'Once a month', 'Once a year', 'Once a year', 'Every month', 'O
nce a year', 'Once a year', 'Once a month', 'Once a month', 'Every month', 'Once a year']
```

```
list5=[]
g,gg,ggg=0,0,0
for x in list2:
    if x>1 and x<100 :
        g=g+1
    elif x>100 and x<500 :
        gg=gg+1
    else:
        ggg=ggg+1
list5.append(g)
list5.append(gg)
list5.append(ggg)
print(list5)
```

```
[5, 2, 7]
```

Exploratory Data Analysis:

Calculation of Mean Ratings - To gain insight into the overall sentiment towards favorite places among survey respondents, the mean rating of people's ratings on their favorite places was calculated. This provided a central measure of the perceived satisfaction or enjoyment associated with the favorite places reported in the survey.

```python
import statistics as sdd
liste=[]
for x in a3["10. Rate your favorite place"]:
    liste.append(x)
print(sdd.mean(liste))
```

```
4.75
```

Data Visualization:

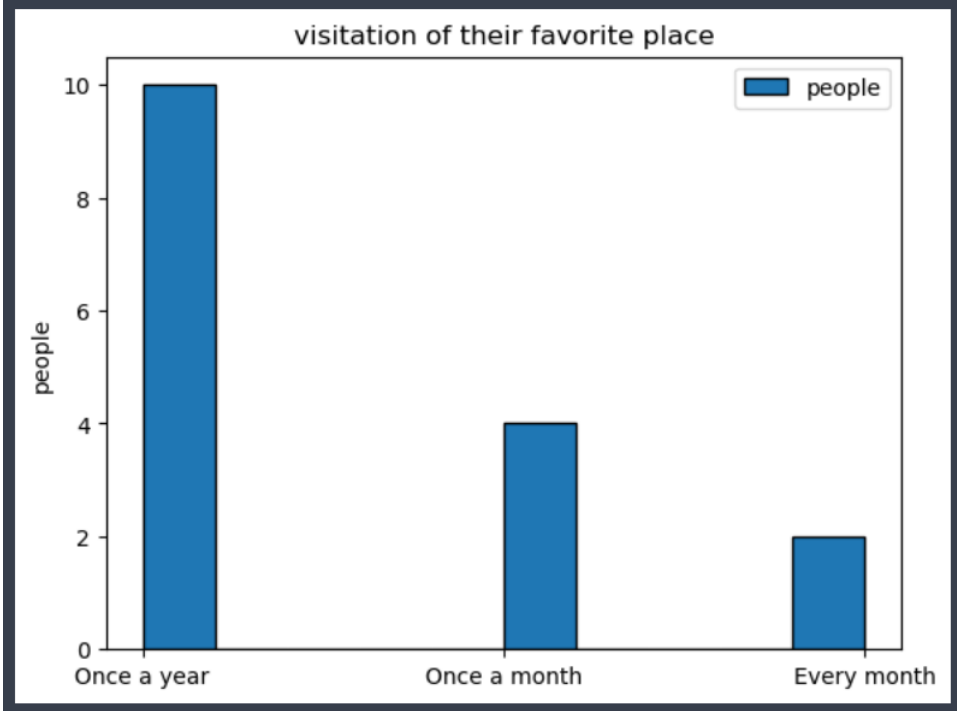
To provide a visual representation of the distribution of visitation frequencies for favorite places among respondents, a **pie chart** was created. This visualization illustrates the proportion of respondents who visit their favorite places with different frequencies, categorized as "Once a Year", "Once a Month", and "Every Month"

```python
import matplotlib.pyplot as plt

plt.pie(list5,labels=["below 100 km","below 500 km","above 500 km"],explode=[0,0.1,0])
plt.title("favorite place's distance from their home                ")
plt.legend()
plt.show()
```

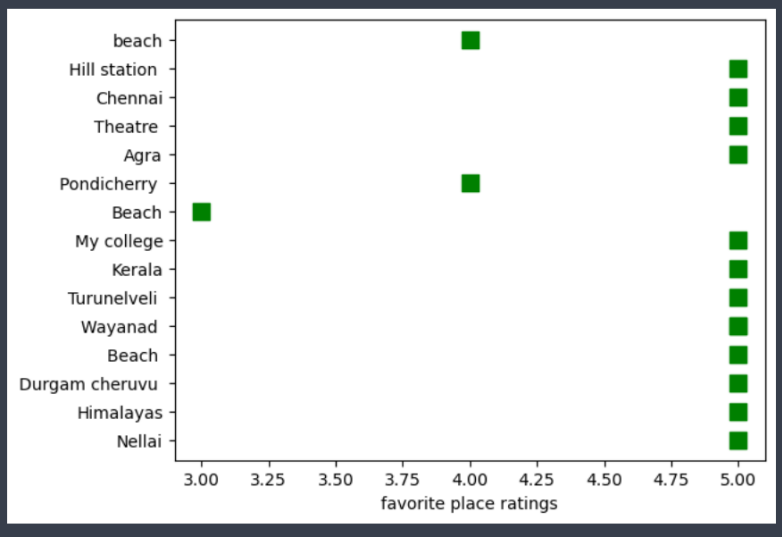
To further explore the distribution of visitation frequencies for favorite places among respondents, a **histogram** was created. This visualization illustrates the count of people visiting their places based on common range visitation categories, including "Once a Year", "Once a Month", and "Every Month".

```
plt.hist(list4,edgecolor='black')
plt.title("visitation of their favorite place")
plt.ylabel("people")
plt.legend(["people"])
plt.show()
```



To explore the relationship between different places and their ratings among respondents, a **scatter plot** was created. This visualization compares the ratings of different places reported in the survey, allowing for the examination of any potential patterns or trends in rating distribution.

```
x1=a3["10. Rate your favorite place"]
x2=a3["3. What is your favorite place?"]
plt.scatter(x1,x2,marker="s",s=100,color="green")
plt.xlabel("favorite place ratings")
plt.show()
```



Insights:

The survey underscores the importance of place attachment in shaping individuals' preferences and behaviors towards their favorite places. Understanding the emotional connections people have with their chosen destinations can inform strategies for community engagement and placemaking initiatives.

Conclusion:

In conclusion, the survey on favorite places has shed light on the diverse preferences, social dynamics, and emotional connections associated with individuals' chosen destinations. By understanding the factors that influence favorite place selection and visitation patterns, stakeholders can design inclusive and vibrant environments that cater to the diverse needs and interests of communities.