## **CAPABILITIES**

- 1. Please provide valid URL. URL must be accessible and check its directly downloaded URL
- 2.Only supports pdf, docx, pptx, csv, txt, xlsx and verify your file is correct format
- 3. If any file is not taken or provide unacceptable format then change your file format into txt file.
- 4.Documents and query only supported in english language.

titanic.csv											×
PASSENGERID	SURVIVED	PCLASS	NAME	SEX	AGE	SIBSP	PARCH	TICKET	FARE	CABIN	EMBARKED
1	0	3	Braund, Mr. Owen Harris	male	22	1	0	A/5 21171	7.25	S	
2	1	1	Cumings, Mrs. John Bradley (Florence Briggs Thayer)	female	38	1	0	PC 17599	71.2833	C85	С
3	1	3	Heikkinen, Miss. Laina	female	26	0	0	STON/02. 3101282	7.925	S	
4	1	1	Futrelle, Mrs. Jacques Heath (Lily May Peel)	female	35	1	0	113803	53.1	C123	S
5	0	3	Allen, Mr. William Henry	male	35	0	0	373450	8.05	S	



### MD ALLMAMUN

provide how much data in here?



## **Sobjata AI Assistant**

Tuesday, August 22, 2023 at 04:16:07 AM

Sure, Here is the necessary code for your desired task:

```
1
 2 import pandas as pd
 3 dfs=[pd.read_csv('titanic.csv')]
 4 \# TODO import all the dependencies required
 6
 7
 8 def analyze_data(dfs: list[pd.DataFrame]) -> dict:
 9
      # Code goes here (do not add comments)
      num_rows = dfs[0].shape[0]
10
      num_columns = dfs[0].shape[1]
11
      return {"type": "text", "value": f"The dataframe has {num_rows} rows and {num_columns} columns."}
12
13
14 # Declare a result variable
```

Run Code

here is the explanation of your necesarry code for your desired task:

This code imports the pandas library.

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Code:

```
import pandas as pd
```

Explanation:

The pandas library is a Python library that provides data structures and data analysis tools. It is commonly used for data science and machine learning tasks.

This code also creates a list of pandas DataFrames.

Code:

```
dfs=[pd.read_csv('titanic.csv')]
```

Explanation:

The read\_csv() function is used to read a CSV file into a pandas DataFrame. The titanic.csv file is a dataset that contains information about passengers on the Titanic.

The next few lines of code define a function called analyze\_data(). This function takes a list of pandas DataFrames as input and returns a dictionary with information about the data.

Code:

```
def analyze_data(dfs: list[pd.DataFrame]) -> dict:
    # Code goes here (do not add comments)
    num_rows = dfs[0].shape[0]
    num_columns = dfs[0].shape[1]
    return {"type": "text", "value": f"The dataframe has {num_rows} rows and {num_columns} columns."}
```

• Explanation:

The shape attribute of a pandas DataFrame returns a tuple with the number of rows and columns in the DataFrame. The num\_rows and num\_columns variables are then used to create a dictionary with information about the DataFrame.

The last line of code declares a variable called result and assigns it the value returned by the analyze\_data() function.

Code:

```
# Declare a result variable
result = analyze_data(dfs)
```

• Explanation:

The analyze\_data() function returns a dictionary with information about the DataFrame. This dictionary is assigned to the result variable.

The final line of code prints the result variable.

Code:

```
print(result)
```

• Explanation:

The print() function prints the value of the result variable to the console.

## Here's your Required Output:

```
The dataframe has 891 \text{ rows} and 12 \text{ columns}.
```



#### **MD ALLMAMUN**

how much survived need descriptive answer



**Sobjata AI Assistant** 

Tuesday, August 22, 2023 at 04:17:12 AM

Sure, Here is the necessary code for your desired task:

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```
"type": "text",
"value": f"The survival rate is {survival_rate:.2f}%."

return result

peclare a result variable
result = analyze_data(dfs)
result
resu
```

{'type': 'text', 'value': 'The survival rate is 38.38%.'}

## here is the explanation of your necesarry code for your desired task:

This code imports the pandas library, which is a Python library for data analysis.

```
import pandas as pd
```

• Explanation: The pandas library is a Python library for data analysis. It provides a number of tools for working with data, including dataframes, which are tabular data structures.

The code then reads the titanic.csv file into a pandas dataframe.

```
dfs=[pd.read_csv('titanic.csv')]
```

• Explanation: The titanic.csv file is a dataset that contains information about the passengers of the Titanic. It includes information such as the passenger's name, age, gender, and whether or not they survived.

The code then defines a function called analyze\_data(). This function takes a list of pandas dataframes as its input and returns a dictionary as its output.

```
def analyze_data(dfs: list[pd.DataFrame]) -> dict:
```

• Explanation: The analyze\_data() function takes a list of pandas dataframes as its input. This list of dataframes should contain the data from the titanic.csv file.

The function then calculates the survival rate of the passengers on the Titanic.

```
survived_count = dfs[0]['Survived'].sum()
total_count = len(dfs[0])
survival_rate = survived_count / total_count * 100
```

• Explanation: The survival rate is calculated by dividing the number of passengers who survived by the total number of passengers. The result is then multiplied by 100 to express it as a percentage.

The function then returns a dictionary with the following keys and values:

- type: The type of the result. In this case, the result is a text string.
- value: The value of the result. In this case, the value is the survival rate.

```
result = {
    "type": "text",
    "value": f"The survival rate is {survival_rate:.2f}%."
}
return result
```

- Explanation: The function returns a dictionary with the following keys and values:
- type: The type of the result. In this case, the result is a text string.
- value: The value of the result. In this case, the value is the survival rate.

The code then declares a variable called result and assigns it the return value of the analyze\_data() function.

```
# Declare a result variable
result = analyze_data(dfs)
```

• Explanation: The result variable is assigned the return value of the analyze\_data() function. This return value is a dictionary with the following keys and values:

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• type: The type of the result. In this case, the result is a text string.

• value: The value of the result. In this case, the value is the survival rate.

The code then prints the result variable to the console.

result
print(result)

- Explanation: The result variable is printed to the console. The result variable is a dictionary with the following keys and values:
- type: The type of the result. In this case, the result is a text string.
- value: The value of the result. In this case, the value is the survival rate.

# **Here's your Required Output:**

The survival rate is 38.38%.

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