

PYTHON ASSIGNMENT 2

1. Nowadays, the 3D is a highly expanding media. More particularly with the emergence of dedicated standards such as VRML and X3D, 3D animations are widely used on the Web. The continuous evolution of computing capabilities of desktop computers is also a factor that facilitates the large deployment of 3D information contents. At the same time the demand in term of 3D information is becoming more and more sustained in various domains such as spatial planning, risks management, telecommunications, transports, defense, and tourism. 3D information should represent a real world scene as accurately as possible and should exhibit properties (like, topological relations) to allow complex spatial analysis [1].

The construction of a 3D scene is a complex and time consuming task. Thus, being able to reuse the 3D scenes is a very important issue for the multimedia...

2.. pandas

Python provides a library called pandas that is popular with data scientists and analysts. Pandas enables users to manipulate and analyze data using sophisticated data analysis tools.

pandas provides two data structures that shape data into a readable form:

Series

Data frame

Series

A pandas series is a one-dimensional data structure that comprises of a key-value pair. It is similar to a python dictionary, except it provides more freedom to manipulate and edit the data.

3....

When working with multiple data sources, there are many chances for data to be incorrect, duplicated, or mislabeled. If data is wrong, outcomes and algorithms are unreliable, even though they may look correct. Data cleaning is the process of changing or eliminating garbage, incorrect, duplicate, corrupted, or incomplete data in a dataset. There's no such absolute way to describe the precise steps in the data cleaning process because the processes may vary from dataset to dataset. Data cleansing, data cleansing, or data scrub is that the initiative among the general data preparation process. Data cleaning plays an important part in developing reliable answers and within the analytical process and is observed to be a basic feature of the info science basics. The motive of data cleaning services is to construct uniform and standardized data sets that enable data analytical tools and business intelligence easy access and perceive accurate data for each problem.

4.

Here's a very simple example to convert an array to a dataframe:

```
import pandas as pd # Create the dataframe df = pd.DataFrame(numpy_array)
df = pd.DataFrame(numpy_array, columns=['digits', 'words']) ...
df = pd.DataFrame(numpy_array, index=['day1', 'day2', 'day3', 'day4'], columns=['digits', 'words'])
```

5.

Different plotting using pandas and matplotlib

We have different types of plots in matplotlib library which can help us to make a suitable graph as you needed. As per the given data, we can make a lot of graph and with the help of pandas, we can create a dataframe before doing plotting of data. Let's discuss the different types of plot in matplotlib by using Pandas.

Use these commands to install matplotlib, pandas and numpy:

```
pip install matplotlib
```

```
pip install pandas
```

```
pip install numpy
```