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Session: 3

#Task 1: What is Miniconda? And the diffrences between Miniconda and Anaconda?

Sol

Both of them are software distributions that are widely used in data science to simplify package management and deployment.

Differences

There are essentially two main differences:

- **1. Number of packages:** Anaconda comes with over 150 data science packages, whereas miniconda comes with only a handful.
- **2. Interface:** Anaconda has a graphical user interface (GUI) called the Navigator, while miniconda has a command-line interface.

#TASK2: not clean code and turn it into clean

Sol

Not Clean

genyyyymmddhhmmss = datetime.strptime('04/27/95 07:14:22',
'%m/%d/%y %H:%M:%S')
Clean
generation_datetime = datetime.strptime('04/27/95 07:14:22', '%m/%d/%y
%H:%M:%S'

#TASK3: What is framework? Uses? Pros? Cons?

Sol

A framework is a structure that you can build software on. It serves as a foundation, so you're not starting entirely from scratch. Frameworks are typically associated with a specific programming language and are suited to different types of tasks.

Why do we use frameworks?

Using frameworks saves time and reduces the risk of errors. You don't need to write everything from the ground up, so there's less chance of introducing errors. Plus, frameworks have already been tested, so there's less to worry about. Other advantages include:

- _More secure code
- _Simpler testing and debugging
- _Avoiding duplicate code
- _Clean and easily adaptable code

| _Able to focus on writing code specific to the project |
|---|
| _Can be extended |
| #TASK4: Most popular 5 processors in laptops and 5 in mobiles? |
| Sol |
| Best mobile processors: |
| _Qualcomm Snapdragon |
| _Apple Mobile processors |
| _Intel Atom and Core M processors |
| _Nvidia Tegra |
| _MediaTek |
| Best laptop processors: |
| _INTEL CORE |
| _AMD RYZEN #TASK5: How to make recursive code faster than iterative which doesn't support multi-threading? Sol |
| #TASK6: what are hashtables? Why do we use hash tables in unordered lists? Sol |
| The Hash table data structure stores elements in key-value |

pairs where

- Key- unique integer that is used for indexing the values
- Value data that are associated with keys.

#TASK7: how to print the error type for the user in try catch?

Sol