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*SU92-BSDSM-008*

*Data Science-2A*

**Task # 02**

***#01: Difference between Class & Object***

* **Class:**

A class is like a blueprint or plan. It defines how objects should look and behave, but it doesn't hold actual data.

* **Object:**

An object is a specific instance created from a class. It holds actual data and can use the methods (functions) defined by its class.

**Classical Example**

As we think of a class as the design of a Buggati. The design tells you where everything will go, but it's not a real car.

The object is the actual car built from that design.

***# 02: Difference between:***

**Constructor Method (\_\_init\_\_) vs. \_\_str\_\_() Function**

* **\_\_init\_\_ (constructor):**

This method runs automatically when you create an object. It sets up the initial state (like assigning values to variables) of the object.

* **\_\_str\_\_():**

This function is called when you print the object or convert it to a string. It provides a readable and understandable description of the object.

**Example**

\_\_init\_\_ is like moving into a house and setting up the furniture.

\_\_str\_\_ is like describing the house to someone when they ask what it looks like.