

# ASSIGNMENT # 3 FOR PIAIC BATCH-2

## IOT TIMINGS (3.30 - 6.30)

1. Define an enum for **Student** where Students have two variants i.e **Online** and **Onsite**.  
Create instances for both variants.
2. Define an enum for **Vehicle** where vehicles are of 3 variants i.e **Cars**, **Trucks**, **Bikes**.  
Create instances for all variants and also pass some data when creating instances.

**Note:** You have to define enum in a way so they can take data when creating instances.

**Use method 1 i.e to create a struct to store data.**

3. **Use method 2: Do Q3 with storing values directly in enum.**
4. Create an enum for **Shape**, where Shapes are of four types i.e **Circle**, **Triangle**, **Rectangle** and **Square**.

Also take the following data when creating shape variants:

- **Radius for Circle.**
- **Length of three Sides for Triangle.**
- **Length of four sides for Rectangle.**
- **Length of four sides for Square.**

Implement a method on enum that returns the type of variant and the data of instance.

Create an instance of each variant and call methods on them.

5. Create four instances of Option enum with following values.

- 150
- 614.98
- “How are you?”
- Null value of datatype f64

6. Create an enum for laptops where laptops are divided into four variants that are **HP**, **Dell**, **Asus**, **Lenovo**.

**Dell** is further divided into 6 variants that are 1000 series, 2000 series, 3000 series, 4000 series, 5000 series and 6000 series.

How will you manage them using enums.

- Create an instance of Lenovo.
- Create an instance of 3000 series of Dell.
- Create an instance of Asus.
- Create an instance of 5000 series of Dell.

Create a function that takes an instance of Laptop enum as parameter and prints the name of company using **match** operator. Also prints the Series in case of Dell laptop.

**BEST OF LUCK!!**