

OOP Exercise 3

Template :

Task 1:

Create function take 2 params of any type then return the max (Template)

Task 2:

Create function take 2 params of any type then swap them and pass data by parameters (Template)

Task 3:

Create Calculator class contains 2 data members with the same template data type and contains 4 method add(), subtract(), multiply() and divide()

Abstraction - Polymorphism :

Task 4:

Modify the code of previous Assignment to solve:

A – Create class Vehicle which contains:

- Vehicle model string
- Registration number string
- Vehicle speed (km/hour) integer
- Fuel capacity (liters) double
- Fuel consumption (liter/km) double
- Parameterized constructor

• **A pure virtual method display()
method that will display all the information of a vehicle.**

B - Create Class Truck which will inherit from Vehicle:

- Cargo weight limit (Kilo grams)// data member
- Parameterized constructor
- Setter and getter
- **A display() method which will override parent method and print all info**

C - Create Class Bus which will inherit from Vehicle:

- Data members: Num of passengers int
- Parameterized constructor
- Setter and getter
- **A display() method which will override parent method and print all info**

Exception Handling :

Task 5:

Create divide function which take (int x, int y) and return y/x
Then solve the case of ($y=0$) by throw your defined exception,
And also solve the case of ($y<0$) by throw another defined exception