

Task 4 - Part1 :

1.

```
class Calculator{
    double summation(double num1,double num2){
        return num1+num2;
    }
    double subtraction(double num1,double num2){
        return num1-num2;
    }
    double multiplication(double num1,double num2){
        return (num1*num2);
    }
    double division(double num1,double num2){
        if(num2 == 0 ){
            return -1;
        }
        return num1/num2;
    }
}

void main(){
    Calculator calculator = Calculator();
    print(calculator.summation(3,2));
    print(calculator.subtraction(500,20000));
    print(calculator.multiplication(3,2));
    print(calculator.division(3,0));

}
```

2.

```

class Shape{
    double height;
    double width;
    Shape(this.height, this.width);
    double area(){
        double result = height*width;
        print("The area of this shape is $result"
    );
        return result;
    }
}

class Triangle extends Shape{
    Triangle(double height, double width) : super(
height , width);

    @override
    double area(){
        double result = .5 * height * width;
        print("The area of the triangle is $result"
    );
        return result;
    }
}
class Rectangle extends Shape{
    Rectangle(double height, double width) : super(
height, width);
}

void main(){
    var triangle = Triangle(20,30);
    triangle.area();
    var rectangle = Rectangle(20,30);
    rectangle.area();
}

```

3.

```

class Mother{
    void display(){
        print("Hi, this is the mother class");
    }
}

class Daugther extends Mother{
    @override
    void display(){
        print("Hi, this is the daugther class");
    }
}

void main(){
    Daugther daugther = Daugther();
    daugther.display();
}

```

4.

```
class Animal{
    String name;
    int age;
    Animal(this.name,this.age);
    void setValue(){
        print("The name is $name , and the age is $age.");
    }
}
void main(){
    Animal zebra = Animal("Zebra",3);
    zebra.setValue();
    Animal dolphin = Animal("Dolphin",5);
    dolphin.setValue();
}
```

5.

```
class Client{
    String name;
    String email;
    String phone;

    Client(this.name,this.email,this.phone);
    void display(){
        print("Client name is $name , Email : $email , Phone : $phone");
    }
}

class Project{
    String title;
    String description;
    DateTime startDate;
    DateTime endDate;

    Project(this.title,this.description,this.startDate,this.endDate);

    void display(){
        print("Project title is $title , Description : $description , startDate : $startDate , endDate : $endDate");
    }
}
```