Advanced Hands-on:

Implement a utility that will use .NET reflection APIs to print “simple” objects.

“Simple” objects are defined as follows:

- They have only **public** properties
- Each property can be of the following types:
  - Object – assume that that object is also a "simple" object
  - Primitive (e.g. int), or string

The program should navigate the object structure and print the structure. Here's an example:

```
class Name

{

    public string FirstName {get; set;}
    public string LastName {get; set;}

}


class Person

{
    public int Age {get; set;}
    public Name Name {get; set;}

}

Name n = new Name();

n.FirstName = "John";
n.LastName = "Doe";

Person p = new Person();
p.Age = 55;
p.Name = n;
```

The output of your utility when run on instance p above should be something like this:

Object of Class "Person"

Age = 55
Name =

Object of Class "Name"

FirstName = "John"

LastName = "Doe"

The format above is just an example; you can use any readable format you like, but keep the indentation of inner objects as in the example.

General guidelines:

- You can assume your input contains only “Simple” objects as defined above
- Total time for the exercise is 1 hour, please do not exceed the allocated time
- In case you are not familiar with .NET reflection APIs please specify that in a comment. Hint: call the GetType() method of Object which is available on the object you are trying to print in order to start accessing the class metadata
- Start with a basic working implementation and then extend to **Arrays** and **Collections**
- Make sure exceptions are handled properly
- Make sure the API to use this utility is convenient to use
- You may use the Google/MSDN website for help. You cannot use libraries outside .NET. or any other external code

Write the code as though you are writing production code