OOP 29.11.2023

Number 2

Name:

Group Number:

Grade: ☐ /10p

1. ((1 p) Implement encapsulation for the class ***Professor*** with the next attributes:

Attribute name	Type	Constraints
Id	Number	Unique, constant
Name	Characters	length>=3
Department	Characters	4 letters max (e.g. CSIE, MRKT, MNGT)
Salary	Number	Between 1500 and 20000
Age	Number	Between 18 and 65

2. (0.5 p) Implement in class ***Professor*** the code that allows to execute in main() the following lines:

```
Professor p0;
Professor p1(”Popescu Andrei”, ”CSIE” ,3500,30);
```

3. (0.5 p) Implement in class ***Professor*** the code for try-catch mechanism that allows to execute in main() the following line:

```
Professor p2(”Popa Ioana”, ”MRKT” ,7500,16);
```

4. (1 p) Implement in class ***Professor*** the code that allows to execute in main() the following lines:

```
Professor p1(”Popescu Andrei”, ”CSIE” ,3500,30);
Professor p3(”Popa Ioana”, ”MNGT” ,7500,19);
p1.getName(); //deep copy
p3.setSalary(1000); //throw exception
```

5. (2 p) Implement in class ***Professor*** the code that allows to execute in main() the following lines:

```
Professor p4(”Stuparu Maria”, ”CSIE” ,6500,25);
Professor p5=p4;
p4=p1;
```

6. (4 p) Implement in class ***Professor*** the code that allows to execute in main() the following lines:

```
    p2=++p1; //overload ++ op to increase the age for professor
    cout<<p3;// overload << op to print a professor.
    cout<<p4[0]; //overload [] op to return the first character of name
attribute.
    p3+=2000;//overload += op to increase the salary with the received
number
```

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OBS:

- You get 1 p by default cause you’re taking the test.
- Your grade will be 1p/10p if you have errors (any type of error)
- If you have memory leaks, your grade will be decreased with 1p.