

Name:

Group Number:

Grade: /10p

1. (1 p) Implement encapsulation for the class **Employee** with the following attributes:

Attribute name	Type	Constraints
Id	Number	Unique, constant
Name	Characters	length>=2
HiringDate	Characters	DDMMYYYY
Salary	Number	Between 1500 and 20000
Age	Number	Between 18 and 65

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

```
Employee e0;
Employee e1("Popescu Andrei","01122022" ,3500,30);
```

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

```
Employee e2("Popa Ioana","15082020" ,7500,16);
```

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

```
Employee e1("Popescu Andrei","01122022" ,3500,30);
Employee e3("Popa Ioana","15082020" ,7500,19);
e1.getName(); //deep copy
e3.setSalary(1000); //throw exception
```

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

```
Employee e4("Stuparu Maria","01032019" ,6500,25);
Employee e5=e4;
e4=e1;
```

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

```
e2++e1; //overload ++ op to increase the age for employee
cout<<e3; // overload << op to print an employee.
cout<<e4[0]; //overload [] op to return the first character of name
attribute.
e3+=2000; //overload += op to increase the salary with the received
number
```

OOP 29.11.2023

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.