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1BM19CS194

3-D

LAB-TEST-2

Write a program that demonstrates handling of exceptions in inheritance tree.
Assume

a company having employees between 18 to 60 years and company started in 2005.

Create a base class called “company” and derived class called “employee” which

extends the base class. In company class, implement a constructor which takes the

year of joining of employee in this company and throws the exception Not Possible()

when the input year of joining <2005. In employee class, implement a constructor that

throws an exception if employee’s 18<age >60.

```
import java.util.*;
```

```
import java.lang.*;
```

```
class wrongyear extends Exception {
```

```
    String s;
```

```
    int n;
```

```
    wrongyear(String s, int n) {
```

```
        this.s = s;
```

```

        this.n = n;

        System.out.println("--invalid reenter correct value " + s + n);
    }

    public String toString() {
        return "wrongyear exception.";
    }
}

class Company {
    Scanner s = new Scanner(System.in);
    int yoj;

    Company() throws wrongyear{
        System.out.println("Enter year of joining: ");
        yoj = s.nextInt();
        if (yoj < 2005) {
            throw new wrongyear("Year of joining is invalid! ", yoj);
        }
    }

    public void display() {
        System.out.println("The Year of Joining is: " + yoj);
    }
}

class Employee extends Company {
    Scanner s = new Scanner(System.in);
    int age;

    public Employee() throws wrongyear {

```

```

        System.out.println("Enter your age: ");
        age = s.nextInt();
        if (age < 18 || age > 60) {
            throw new wrongyear("Age cannot be less than 18 or more than 60 ",
age);
        }
    }

    public void display_emp() {
        System.out.println("the Age is: " + age);
    }
}

class empcomp {
    public static void main(String[] args) {
        try{
            Employee e = new Employee();
            e.display();
            e.display_emp();
        } catch(wrongyear n) {
            System.out.println(n);
        }
    }
}

```

```
C:\windows\SYSTEM32\cmd.exe
Enter year of joining:
2019
Enter your age:
19
The Year of Joining is: 2019
the Age is: 19

-----
(program exited with code: 0)
Press any key to continue . . .
```

```
C:\windows\SYSTEM32\cmd.exe
Enter year of joining:
2004
--invalid reenter correct value Year of joining is invalid! 2004
wrongyear exception.

-----
(program exited with code: 0)
Press any key to continue . . .
```

```
C:\windows\SYSTEM32\cmd.exe
Enter year of joining:
2019
Enter your age:
62
--invalid reenter correct value Age cannot be less than 18 or more than 60 62
wrongyear exception.

-----
(program exited with code: 0)

Press any key to continue . . .
```