

30/01/24

## lab program - 7

```
import java.util.Scanner;
class WrongAgeException extends Exception {
    public WrongAgeException (String e) {
        super(e);
    }
}

class father {
    private int fage;
    public father (int fage) throws WrongAgeException {
        if (fage < 0) {
            throw new WrongAgeException ("age cannot be negative");
        }
        this.fage = fage;
    }
    public void display() {
        System.out.println ("father age: " + fage);
    }
}

class son extends father {
    private int sage;
    public son (int sage, int fage) throws WrongAgeException {
        super(fage);
        if (sage > fage) {
            throw new WrongAgeException ("son age cannot be greater than or equal to father age");
        }
        if (sage < 0) {
            throw new WrongAgeException ("age cannot be negative");
        }
    }
}
```

```

        this.sage = sage;
    }
    public void show()
    {
        System.out.println("son age:" + sage);
    }
}

```

```

public class ageMain {
    public static void main (String args[]) {
        Scanner s = new Scanner (System.in);
        System.out.println("enter the father age:");
        int fatherage = s.nextInt();
        System.out.println("enter son age:");
        int sonage = s.nextInt();
        try {
            Son son = new Son (sonage, fatherage);
            son.display();
            son.show();
        }
        catch (WrongAgeException e) {
            System.out.println("error!" + e.getMessage());
        }
    }
}

```

Q/P.1 enter the father age:

30

enter son age: 40

error: son age cannot be greater than father age.

Q/P.2 enter the father age: -10

enter the son age: 20

negative

8/30/01/24



Q/P3 enter father age: 30

enter son age: 20

father age: 30

son age: 20

$$\begin{array}{r} 8 \\ 30/0/24 \end{array}$$