LAB-7

→ Write a program that demonstrates handling of exception in inheritance tree. Create a base class called "Father". & a derived class called "Son" which extends the baseclass. In Father's class, implement a constructor which takes the ~~s~~ age & throws ~~state~~ the exception wrong age when input age is less than zero. in son's cla Implem a constructor that uses father's & son's age & throws an exception if son's age is ≥ father's age. }

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```
Import java.util.scanner
Class myException extends Exception{
   public String toString() {
      return "Age should be greater than 0";
   }
}
Class myexcep extends Exception {
    public String toString() {
       return "Father's age should be greater than
                  son's";
    }
}
class father {
   int fage;
   father(int fage) {
      this.fage = fage;
   }
   void wrongAge (int a) throws myException {
```

```
if(a<=0) {
  throw new myException();
}
else {
  System.out.println(" valid age "+a);
 }
}
class son extends father {
  int sage;
  son(int fage, int sage) {
    super(fage);
   this.sage = sage;
  }
 void checkage() throws myexcep {
  if(sage>fage) {
   throw new   myexcep();
  }
  else {
  System.out.println("valid, Son's age is "+sage);
 }}
~~void~~
class main{
 public static void main( String args[]) {
  Scanner s = new Scanner(System.in);
  int age1 ,age2;
 System.out.println(" enter father's age:");
  age1= s.nextInt();
  father f = new father(age1);
  try {
     f.wrongAge(age1);
  }
cath (myException e) {
      System.out.println("caught: "+e);
}
System.out.println("Enter son's age");
age2 = s.nextInt();
son s1 = new son(age1, age2);
try {
     s1.checkage();
}
~~cath~~ catch(my excep e1) {
     System.out.println("caught:" +e1);
  }
 }
}
```

o/p.

```
Enter father's age
0
caught: ~~Father's age should be greater than son's~~
        age should be greater than 0
Enter son's age
80
caught: Father's age should be greater than
   son's.

Enter father's age
60
valid age 60
 Enter son's age
40
valid, son's age is 40
```

Enter father's age
70
valid age 70.
Enter son's age
73
~~valid, son's age is~~
Caught: Father's age should be greater than son's.

20/11/24