

1008

Write a program that demonstrates handling of exceptions in inheritance. Create a base class "Father" and derived class called "Son" which extends the base class. In Father class, implement a constructor which takes the age and throws the exception Wrong Age () when the input age = father's age.

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

```
class WrongAge extends Exception
```

```
{  
    public String toString ()
```

```
{  
        return "Exception - INVALID AGE";
```

```
}
```

```
}
```

```
class Father
```

```
{  
    int father-age;
```

```
Father (int a) throws WrongAge
```

```
{  
    Scanner sc = new Scanner (System.in);  
    System.out.println ("Enter father's age : ");  
    father-age = sc.nextInt();  
    if (father-age <= 0)
```

```
{  
        throw new WrongAge ();
```

```
}
```

```
else
```

```
{  
    System.out.println ("VALID AGE");  
    System.out.println ("Father's age = "  
        + father-age);  
    System.out.println ("Son's age = " + a);
```

```
}
```

```
}
```

```
}
```

class Son extends Father

{

Put son-age;

Son(Put a). throws WrongAge

{

super(a);

son-age = a;

}

}

class Main

{

public static void main(String args[])

{

System.out.println("Enter son's age:");

try

{

Son s1 = new Son(new Scanner(System.in).nextInt());

}

catch (WrongAge e)

{

System.out.println(e);

}

}

}

```
Command Prompt
C:\Users\sagar G\Dropbox\My PC (LAPTOP-DFE3MJ0A)\Documents\JAVA>java Main
Enter son'age :
19
Enter Father's age :
50
VALID AGE
Father's age = 50
Son's age = 19

C:\Users\sagar G\Dropbox\My PC (LAPTOP-DFE3MJ0A)\Documents\JAVA>java Main
Enter son'age :
40
Enter Father's age :
35
Exception - INVALID AGE

C:\Users\sagar G\Dropbox\My PC (LAPTOP-DFE3MJ0A)\Documents\JAVA>
```