23BAI1117 – BCSE103E – Java

08/08/2024 – Day7

https://github.com/sriram-s-23BAI1117/javap

1)

```java
J OOPEx1.java > ...
1    public class OOPEx1{
2        int x = 5;
         Run | Debug
3        public static void main(String[] args) {
4            OOPEx1 myObj = new OOPEx1();
5            System.out.println(myObj.x);
6        }
7    }
```

```
PS E:\Day8-08-08-24>  & 'C:\Program Fil
age\08ade1f6cb01874a2d7a13e5ff49b165\re
5
```

2)

```java
J OOPEx2.java > ...
1    public class OOPEx2{
2        int x = 5;
         Run | Debug
3        public static void main(String[] args) {
4            OOPEx2 myObj1 = new OOPEx2();
5            OOPEx2 myObj2 = new OOPEx2();
6            System.out.println(myObj1.x);
7            System.out.println(myObj2.x);
8        }
9    }
```

```
PS E:\Day8-08-08-24>  & 'C:\P
rs\student.PROGRAMMING404\App
5
5
```

3)

```java
J OOPEx3_1.java > ...
  1    public class OOPEx3_1 {
  2        int x = 5;
  3    }
```

```java
J OOPEx3_2.java > ...
  1    public class OOPEx3_2 {
       Run | Debug
  2        public static void main(String[] args) {
  3            OOPEx3_1 myObj = new OOPEx3_1();
  4            System.out.println(myObj.x);
  5        }
  6    }
```

```
PS E:\Day8-08-08-24>  & 'C:\Program F
' '-cp' 'C:\Users\student.PROGRAMMING
2b0699\bin' 'OOPEx3_2'
5
```

4)

```java
J OOPEx4.java > ...
  1    public class OOPEx4 {
  2        int x;
       Run | Debug
  3        public static void main(String[] args) {
  4            OOPEx4 myObj = new OOPEx4();
  5            myObj.x = 40;
  6            System.out.println(myObj.x);
  7        }
  8    }
```

```
PS E:\Day8-08-08-24>  & 'C:\Program Files\
' '-cp' 'C:\Users\student.PROGRAMMING404\A
2b0699\bin' 'OOPEx4'
40
```

5)

```java
public class OOPEx5 {
    int x = 10;
    Run | Debug
    public static void main(String[] args) {
        OOPEx5 myObj = new OOPEx5();
        myObj.x = 25;
        System.out.println(myObj.x);
    }
}
```

```
PS E:\Day8-08-08-24>  & 'C:\Program Fil
1874a2d7a13e5ff49b165\redhat.java\jdt_w
25
```

6)

```java
public class OOPEx6 {
    final int x = 10;
    Run | Debug
    public static void main(String[] args) {
        OOPEx6 myObj = new OOPEx6();
        myObj.x = 25;
        System.out.println(myObj.x);
    }
}
```

```
PS E:\Day8-08-08-24>  & 'C:\Program Files\Java\jdk1.8.0_202\bin\java.exe' '-cp' 'C:\
1874a2d7a13e5ff49b165\redhat.java\jdt_ws\Day8-08-08-24_212b0699\bin' 'OOPEx6'
Exception in thread "main" java.lang.Error: Unresolved compilation problem:
        The final field OOPEx6.x cannot be assigned

        at OOPEx6.main(OOPEx6.java:5)
```

7)

```java
J OOPEx7.java > ...
  1    public class OOPEx7 {
  2        int x = 5;
         Run | Debug
  3        public static void main(String[] args) {
  4            OOPEx7 myObj1 = new OOPEx7();
  5            OOPEx7 myObj2 = new OOPEx7();
  6            myObj2.x = 25;
  7            System.out.println(myObj1.x);
  8            System.out.println(myObj2.x);
  9        }
 10    }
```

```
PS E:\Day8-08-08-24>  & 'C:\Program Fil
' '-cp' 'C:\Users\student.PROGRAMMING40
2b0699\bin' 'OOPEx7'
5
25
```

8)

```java
J OOPEx8.java > ...
  1    public class OOPEx8 {
  2        String fname = "John";
  3        String lname = "Doe";
  4        int age = 24;
         Run | Debug
  5        public static void main(String[] args) {
  6            OOPEx8 myObj = new OOPEx8();
  7            System.out.println("Name: "+myObj.fname+" "+myObj.lname);
  8            System.out.println("Age: "+myObj.age);
  9        }
 10    }
```

```
PS E:\Day8-08-08-24>  & 'C:\Program Files\Java\
age\08ade1f6cb01874a2d7a13e5ff49b165\redhat.jav
Name: John Doe
Age: 24
```

9)

```java
public class OOPEx9 {
    static void myMethod(){
        System.out.println(x:"Hello World!");
    }
    Run | Debug
    public static void main(String[] args) {
        myMethod();
    }
}
```

```
PS E:\Day8-08-08-24>  & 'C:\Program Fil
age\08ade1f6cb01874a2d7a13e5ff49b165\re
Hello World!
```

10)

```java
public class OOPEx10 {
    static void myStaticMethod(){
        System.out.println(x:"Static methods can be called without creating objects");
    }

    public void myPublicMethod(){
        System.out.println(x:"Public methods must be called by creating objects");
    }

    Run | Debug
    public static void main(String[] args) {
        myStaticMethod();
        OOPEx10 myObj = new OOPEx10();
        myObj.myPublicMethod();
    }
}
```

```
PS E:\Day8-08-08-24>  & 'C:\Program Files\Java\jdk1.8.0_202\
rs\student.PROGRAMMING404\AppData\Roaming\Code\User\workspac
Static methods can be called without creating objects
Public methods must be called by creating objects
```

11)

```java
public class OOPEx11 {
    public void fullThrottle(){
        System.out.println(x:"The car is going as fast as it can!");
    }
    public void speed(int maxSpeed){
        System.out.println("Max speed is: "+ maxSpeed);
    }
    Run | Debug
    public static void main(String[] args) {
        OOPEx11 myCar = new OOPEx11();
        myCar.fullThrottle();
        myCar.speed(maxSpeed:200);
    }
}
```

```
PS E:\Day8-08-08-24>  & 'C:\Program Files\Java\jdk1.8.0_2
age\08ade1f6cb01874a2d7a13e5ff49b165\redhat.java\jdt_ws\D
The car is going as fast as it can!
Max speed is: 200
```

12)

```java
public class OOPEx12 {
    int x;
    public OOPEx12(){
        x = 5;
    }
    Run | Debug
    public static void main(String[] args) {
        OOPEx12 myObj = new OOPEx12();
        System.out.println(myObj.x);
    }
}
```

```
PS E:\Day8-08-08-24>  & 'C:\Program File
age\08ade1f6cb01874a2d7a13e5ff49b165\re
5
```

13)

```java
public class OOPEx13 {
    int x;
    public OOPEx13(int y){
        x = y;
    }
    Run | Debug
    public static void main(String[] args) {
        OOPEx13 myObj = new OOPEx13(y:5);
        System.out.println(myObj.x);
    }
}
```

```
PS E:\Day8-08-08-24>  & 'C:\Program
' '-cp' 'C:\Users\student.PROGRAMMIN
2b0699\bin' 'OOPEx13'
5
```