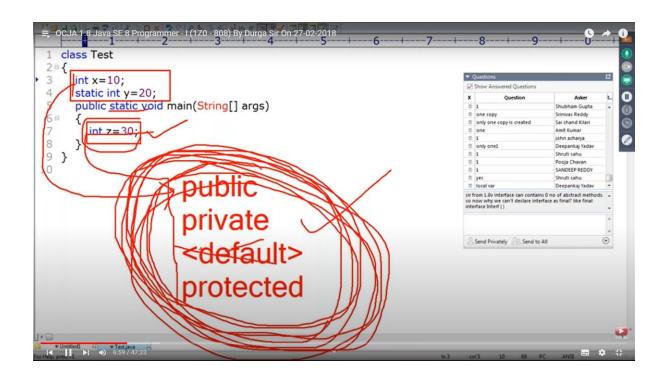
Local Variable has a fixed scope and cannot be public static private protected or default

Only acceptable modifier is final



```
class Test

class Test

int x=10;
static int y=20;
public static void main(String[] args)

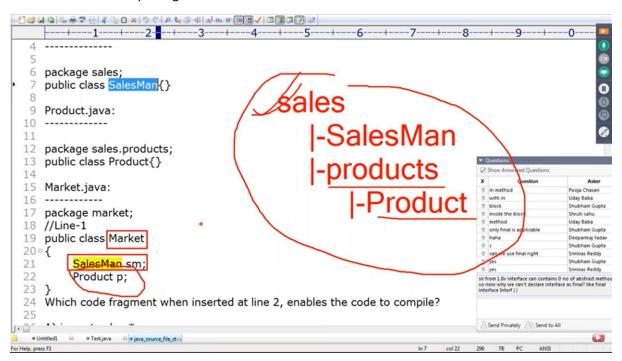
public int z=30;

D:\durgaclasses>javac Test.java

Test.java:7: error: illegal start of expression

public int z=30;
```

If you import a package subpackage classes will not be imported. We need to write import statement till the subpackage level



## .\* is a must. E is the right answer

```
25
26 A) import sales.*;
27 B) import java.sales.products.*;
28 C) import sales;
29 import sales.products;
30 D) import sales.*;
31 import products.*;
32 E) import sales.*;

Import sales.products.*;

Import sales.products.*;

Import sales.products.*;
```

```
35 Q2. Consider the code
  36 package pack1;
  37 public class A
  38 □ {
  39
            int p;
  40
 41
            protected int r; I
  42
            public int s;
  43 }
  45 Test.java:
  47 package pack2;
  48 import p1.A;
  49 public class Test extends A
  50 □ {
  51
            public static void main(String[] args)
  52 ₪
  53
                  A obj= new Test();
  54
            }
  55 }
  56
  57 Which statement is true?
  59 A) By using obj we can access p and s
60 B) By using obj we can access only s
61 C) By using obj we can access r and s
 62 D) By using obj we can access p,r and s
```

S is public and can be used . B is the right answer.

P is default – cant be used in other pack

Private has a class level scope

Protected – Obj has a parent reference not child class reference

```
6 protected:
7 ------
8 within the current package anywhere
9 outside package only in the child classes and compulsory we should use child
10 refere
```

```
G3. Which of the following code fragments are valid?

A)

public abstract class Test

public void m1();
public void m2();

T1

Public abstract class Test

public abstract class Test

public abstract class Test

public abstract void m1();
public abstract void m1();
public void m2();

Public abstract void m1();
public void m2();

Public abstract void m1();
public void m2();
```

A is invalid – Abstract class method should be abstract

B is invalid m2 Is not declared abstract. Ither should have body or should be declared abstract

```
C)
public abstract class Test
 80
 81
 82 8 {
 83
          public abstract void m1();
public void m2(){}
 84
85 }
 86 D)
 87 public abstract class Test
88 8
 89
          public abstract void m1(){}
 90
          public abstract void m2(){}
 91 }
92
```

C is right answer

D wrong has body besides being declared abstract

```
93
 94 Q4. You are asked to develop a program for a shopping application, and you are given the following inform
 96 The application must contains the classes Book, JavaBook and PythonBook. The Book class is the super cla
 98 The int calculatePrice(Book b) method calculates the price of the Book.
 99 The void printBook(Book b) method prints the details of the Book.
100
     Which definition of the Book class adds a valid layer of abstraction to the class hierarchy?
101
103 A)
104 public abstract class Book
105 8 {
106
           public abstract int calculatePrice(Book b);
107
           public void printBook(Book b){}
108 }
```

## A is valid

```
110 B)
111 public abstract class Book
112 = {
113
           public int calculatePrice(Book b);
114
           public void printBook(Book b);
115
116
117 C)
118 public abstract class Book
1198{
120
           public int calculatePrice(Book b);
121
           public final void printBook(Book b){}
122 }
```

### B is invalid methods are not abstract

#### C is invalid

D invalid - Body for abstract method

```
---+---1----+---2----+--3----+---4----+---5----+---6---+---7----+---8----+---9---+---0---------
131
132 Q5. Consider the code
133
134 Interface Interf
135 □ {
136
          public void m1();
137
         public void m2();
138 }
139 class A implements Interf
140 ⊟ {
141
         public void m1(){}
142 }
143
144 Which of the following changes individually will compile the code successfully?
145
146 A) insert public void m2(){} inside class A
147 B) declare class A as abstract
148 C) insert public void m2(); inside class A
149 D) No Changes are required
150
```

A is the right answer

B is the right answer. Class A as abstract and extending class will implement

```
1 interface Writable
 2 □ {
3
      public void writeBook();
 4
      public void setBookMark();
 5 }
 6 abstract class Book implements Writable //Line-1
      public void writeBook(){}
9
      //Line-2
10 }
11 class EBook extends Book //Line-3
12 - {
13
      public void writeBook(){}
14
     //Line-4
15 }
16
17 And given the code Fragment:
18
19 Book b1= new EBook();
20 b1.writeBook();
```

# D right

```
Which option enables the code to compile?

18

19 A) Replace the code fragment at Line-3 with:
20
abstract class EBook extends Book
21
22 B) Replace the code fragment at Line-1 with:
23
class Book implements Writable
24
25 C) At Line-2 insert
26
public abstract void setBookMark();
27
28 D) At Line-4 insert:
29
public void setBookMark(){}
```

```
191 X.java:
192
193 public class X
1948{
195
             public void a(){}
             int a;
196
197 }
198
199 Y.java:
200
201 public class Y
202 □ {
203
             private int doStuff()
2048
205
                  private int i =100;
206
207
                  return i++;
208 }
210 Z.java: 211
212 import java.io.*;
213 package pack1;
214 class Z
215 € {
             public static void main(String[] args)throws IOException
216
217
218
219 }
220
221 Which Statement is true?
222
A) Only X.java file compiles successfully
Only Y.java file compiles successfully
225 C) Only Z.java file compiles successfully
226 D) Only X.java and Y.java files compile successfully
227 E) Only Y.java and Z.java files compile successfully F) Only X.java and Z.java files compile successfully
```

A is the right answer

Y Class – local variable is declared private

Z Class – Package statement should be the first non comment line

```
A.java:
 2
    package pack1;
 4
    public class A
 5
 6
 7
 8 B.java:
10 package pack1.pack2;
11 //Line-1
12 public class B
13 □ {
14
     public void m1()
15 □
16
         A a = new A();
17
18 }
20 C.java:
21 package pack3;
22 //Line-2 I
•23 import pack1.
24 public class C 25 8 {
26
       public static void main(String[] args)
27□
       {
28
         A a = new A();
         Bb = new B();
29
30
       }
31 }
```

A is correct. Look at c - 285 needs pack1.pack2.\*;

#### D for line2 - Pack 1 A class is also needed

```
265 Which modifications enables the code to compile?
266
267 A) Replace Line-1 with:
268
       import pack1.A;
269
270
       Replace Line-2 with:
271
271 import pack1.A;
272 import pack1.pack2.B;
273
274 B) Replace Line-1 with:
275
276
       import pack1;
277
       Replace Line-2 with:
278
       import pack1;
279
       import pack1.pack2;
```

```
281 °C) Replace Line-1 with:

import pack1.A;

Replace Line-2 with:
import pack1.*;

286

287 D) Replace Line-1 with:
import pack1.*;

288

import pack1.*;

289

290 Replace Line-2 with:
import pack1.pack2.*;
```