JAVA means DURGA SOFT

SCJP / OCJP

Question Bank

Chapter 1: Language Fundamentals



DURGA M.Tech

(Sun certified & Realtime Expert)

Ex. IBM Employee

Trained Lakhs of Students for last 14 years across INDIA

India's No.1 Software Training Institute

DTRGASOFT

www.durgasoft.com Ph: 9246212143,8096969696

1. Language Fundamentals

```
Q: 1 Given
10. class Foo {
11. static void alpha() { /* more code here */ }
12. void beta() { /* more code here */ }Page 2 of 14Attention:
13. }
Which two statements are true? (Choose two.)
A. Foo.beta() is a valid invocation of beta().
B. Foo.alpha() is a valid invocation of alpha().
C. Method beta() can directly call method alpha().
D. Method alpha() can directly call method beta().
Q: 2 Given:
12. public class Yippee2 {
13.
14. static public void main(String [] yahoo) {
15. for(int x = 1; x < yahoo.length; x++) {
16. System.out.print(yahoo[x] + " ");
17. }
18. }
19. }
and the command line invocation:
java Yippee2 a b c
What is the result?
A. a b
B. b c
C. a b c
D. Compilation fails.
E. An exception is thrown at runtime.
Q: 3 Given:
15. public class Yippee {
16. public static void main(String [] args) {
17. for(int x = 1; x < args.length; x++) {
18. System.out.print(args[x] + " ");
19. }
20. }
21. }
and two separate command line invocations:
java Yippee
java Yippee 1 2 3 4
```

```
What is the result?
A. No output is produced.
B. No output is produced.
234
C. No output is produced.
D. An exception is thrown at runtime.
E. An exception is thrown at runtime.
234
F. An exception is thrown at runtime.
Q: 4 Given a class Repetition:
1. package utils;
2.
3. public class Repetition {
4. public static String twice(String s) { return s + s; }
5. }
and given another class Demo:
1. // insert code here
2.
3. public class Demo {
4. public static void main(String[] args)
5. System.out.println(twice("pizza"));
6. }
7. }
Which code should be inserted at line 1 of Demo. java to compile and run Demo to print
"pizzapizza"?
A. import utils.*;
B. static import utils.*;
C. import utils.Repetition.*;
D. static import utils.Repetition.*;
E. import utils.Repetition.twice();
F. import static utils.Repetition.twice;
G. static import utils. Repetition. twice;
Q: 5 A JavaBeans component has the following field:
11. private boolean enabled;
Which two pairs of method declarations follow the JavaBeans standard for accessing this field?
(Choose two.)
A. public void setEnabled( boolean enabled )
public boolean getEnabled()
```

DURGASOFT, # 202,2nd Floor, HUDA Maitrivanam, Ameerpet, Hyderabad - 500038, **2** 040 - 64 51 27 86, 80 96 96 96, 9246212143 | www.durgasoft.com Page 3

```
B. public void setEnabled( boolean enabled )public void isEnabled()C. public void setEnabled( boolean enabled )public boolean isEnabled()D. public boolean setEnabled( boolean enabled )public boolean getEnabled()
```

O: 6

Given classes defined in two different files:

- 1. package util;
- 2. public class BitUtils {
- 3. public static void process(byte[]) { /* more code here */ }
- **4.** }
- 1. package app;
- 2. public class SomeApp {
- 3. public static void main(String[] args) {
- **4.** byte[] bytes = new byte[256];
- 5. // insert code here
- **6.** }
- 7. }

What is required at line 5 in class SomeApp to use the process method of BitUtils?

- A. process(bytes);
- B. BitUtils.process(bytes);
- C. util.BitUtils.process(bytes);
- D. SomeApp cannot use methods in BitUtils.
- <u>E. import util.BitUtils.*</u>; process(bytes);

Q: 7 Given:

enum Example { ONE, TWO, THREE }
Which statement is true?

- A. The expressions (ONE == ONE) and ONE equals (ONE) are both guaranteed to be true.
- B. The expression (ONE < TWO) is guaranteed to be true and ONE.compareTo(TWO) is guaranteed to be less than one.
- C. The Example values cannot be used in a raw java.util.HashMap; instead, the programmer must use a java.util.EnumMap.
- D. The Example values can be used in a java.util.SortedSet, but the set will NOT be sorted because <u>enumerated</u> types do NOT implement java.lang.Comparable.
- O: 8 Given:
- 11. public abstract class Shape {
- 12. private int x;
- 13. private int y;
- 14. public abstract void draw();

```
15. public void setAnchor(int x, int y) {
16. this.x = x;
17. this.y = y;
18. }
19. }
```



Which two classes use the Shape class correctly? (Choose two.)

```
A. public class Circle implements Shape {
private int radius;
}
B. public abstract class Circle extends Shape {
private int radius;
}
C. public class Circle extends Shape {
private int radius;
public void draw();
}
D. public abstract class Circle implements Shape {
private int radius;
public void draw();
}
E. public class Circle extends Shape {
private int radius;
public void draw() {/* code here */}
F. public abstract class Circle implements Shape {
private int radius;
```

public void draw() { /* code here */ }

Q: 09 Given:

10. class Nav{

11. public enum Direction { NORTH, SOUTH, EAST, WEST }

12. }

13. public class Sprite{

14. // insert code here

15. }

Which code, inserted at line 14, allows the Sprite class to compile?

A. Direction d = NORTH;

B. Nav.Direction d = NORTH:

C. Direction d = Direction.NORTH;

D. Nav.Direction d = Nav.Direction.NORTH;

Q: 10 Click the Exhibit button.

Which three statements are true? (Choose three.)

```
10. interface Foo {
11.
12. }
      int bar();
13.
14. public class Beta {
15.
16.
      class A implements Foo {
17.
        public int bar() { return 1; }
18.
19.
20.
      public int fubar( Foo foo ) { return
foo.bar(); }
21.
22.
      public void testFoo() {
23.
        class A implements Foo {
25.
          public int bar() { return 2; }
27.
        System.out.println( fubar( new A() )
28.
Ź9.
      }
30.
31.
      public static void main( String[] argv
) {
32.
        new Beta().testFoo();
33.
34. }
```

A. Compilation fails.

B. The code compiles and the output is 2.

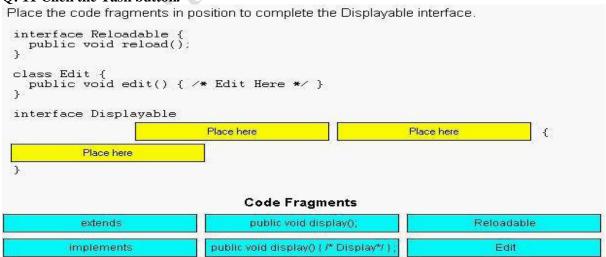
C. If lines 16, 17 and 18 were removed, compilation would fail.

DURGASOFT, # 202,2nd Floor, HUDA Maitrivanam, Ameerpet, Hyderabad - 500038, **2** 040 - 64 51 27 86, 80 96 96 96, 9246212143 | www.durgasoft.com Page 6

- D. If lines 24, 25 and 26 were removed, compilation would fail.
- E. If lines 16, 17 and 18 were removed, the code would compile and the output would be 2.
- F. If lines 24, 25 and 26 were removed, the code would compile and the output would be 1.



Q: 11 Click the Task button.



```
Solution:
interface Reloadable{
  public void reload();
class Edit{
  public void edit(){/* Edit Here*/}
 interface Displayable
Q:12 Given:
35. String #name = "Jane Doe";
36. int age = 24;
37. Double height = 123.5;
38. double \simtemp = 37.5;
Which two statements are true? (Choose two.)
A. Line 35 will not compile.
B. Line 36 will not compile.
C. Line 37 will not compile.
D. Line 38 will not compile.
Q: 13 Given:
55. int [] x = \{1, 2, 3, 4, 5\};
56. int y[] = x;
57. System.out.println(y[2]);
Which statement is true?
A. Line 57 will print the value 2.
B. Line 57 will print the value 3.
C. Compilation will fail because of an error in line 55.
D. Compilation will fail because of an error in line 56.
A programmer needs to create a logging method that can accept an
arbitrary number of arguments. For example, it may be called in these ways:
logIt("log message1");
logIt("log message2","log message3");
logIt("log message4","log message5","log message6");
Which declaration satisfies this requirement?
A. public void logIt(String * msgs)
B. public void logIt(String [] msgs)
C. public void logIt(String... msgs)
D. public void logIt(String msg1, String msg2, String msg3)
```

Q: 15 Which two code fragments correctly create and initialize a static array of int elements? (Choose two.) A. static final int[] $a = \{100,200\}$; B. static final int[] a; static { a=new int[2]; a[0]=100; a[1]=200; } C. static final int[] $a = new int[2] \{ 100,200 \};$ D. static final int[] a; static void init() { $a = \text{new int}[3]; a[0]=100; a[1]=200; }$ Answer: A, B O: 16 Given: 11. public static void main(String[] args) { **12.** String str = "null"; 13. if (str == null) { 14. System.out.println("null"); 15. } else (str.length() == 0) { 16. System.out.println("zero"); 17. } else { 18. System.out.println("some"); **19.** } **20.** } What is the result? A. null B. zero C. some D. Compilation fails. E. An exception is thrown at runtime. Q: 17 Click the Exhibit button. Given: 34. Test t = new Test(); 35. t.method(5); What is the output from line 5 of the Test class? 1. public class Test { int x = 12; public void method(int x) { System.out.println(x);

7. }

A. 5 B. 10 C. 12 D. 17

E. 24

Q: 18 Given

11. public interface Status {

12. /* insert code here */ int MY_VALUE = 10;

13. }

Which three are valid on line 12? (Choose three.)

A. final

B. static

C. native

D. public

E. private

F. abstract

G. protected



AN ISO 9001:2008 CERTIFIED

THE A
SOFTWARE SOLUTIONS

#202 2nd FLOOR www.durgasoft.com

040-64512786 +91 9246212143 +91 8096969696

Question: 19

A programmer is designing a class to encapsulate the information about an inventory item. A JavaBeans component is needed to do this. The Inventoryltem class has private instance variables to store the item information:

10. private int itemId;

10. private int itemu,

11. private String name;

12. private String description;

Which method signature follows the JavaBeans naming standards for modifying the itemld instance variable?

A. itemID(int itemId)

B. update(int itemId)

C. setItemId(int itemId)

D. mutateItemId(int itemId)

E. updateItemID(int itemId)

Question:20

Given a file GrizzlyBear.java:

1. package animals.mammals;

2.

DURGASOFT, # 202,2nd Floor, HUDA Maitrivanam, Ameerpet, Hyderabad - 500038, **2** 040 - 64 51 27 86, 80 96 96 96, 9246212143 | www.durgasoft.com Page 10

```
3. public class GrizzlyBear extends Bear {
4. void hunt() {
5. Salmon s = findSalmon();
6. s.consume();
7.}
8. }
and another file, Salmon.java:
1. package animals.fish;
2.
3. public class Salmon extends Fish {
4. void consume() { /* do stuff */ }
5. }
Assume both classes are defined in the correct directories for theft
packages, and that the Mammal class correctly defines the
findSalmon() method. Which two changes allow this code to compile
correctly? (Choose two.)
A. add public to the start of line 4 in Salmon.java
B. add public to the start of line 4 in GrizzlyBear.java
C. add import animals.mammals.*; at line 2 in Salmon.java
D. add import animals.fish.*; at line 2 in GrizzlyBear.java
E. add import animals.fish.Salmon.*; at line 2 in GrizzlyBear.java
F. add import animals.mammals.GrizzlyBear.*;at line 2 in Salmon.java
Question:21
Given:
11. public class Barn {
12. public static void main(String[] args)
13. new Barn().go("hi", 1);
14. new Barn().go("hi", "world", 2);
16. public void go(String... v, int x) {
17. System.out.print(y[y.length - 1] + " ");
18. }
19. }
What is the result?
A. hi hi
B. hi world
C. world world
D. Compilation fails.
E. An exception is thrown at runtime.
Ouestion:22
Given:
11. class Mud {
12. // insert code here
13. 14. }
System.out.println("hi");
15. }
```

DURGASOFT, # 202,2nd Floor, HUDA Maitrivanam, Ameerpet, Hyderabad - 500038, **2** 040 − 64 51 27 86, 80 96 96 96, 9246212143 | www.durgasoft.com Page 11

```
And the following five fragments:
public static void main(String...a) {
public static void main(String.* a) {
public static void main(String... a) {
public static void main(String[]... a) {
public static void main(String...[] a) {
How many of the code fragments, inserted independently at line 12, compile?
A. 0
B. 1
C. 2
D. 3
E. 4
F. 5
Question:23
Given:
1. class Alligator {
2. public static void main(String[] args) {
3. int []x[] = \{\{1,2\}, \{3,4,5\}, \{6,7,8,9\}\};
4. int [][]y = x;
5. System.out.println(y[2][1]);
6. }
7. }
What is the result?
A. 2
B. 3
C. 4
D. 6
E. 7
F. Compilation fails.
Question:24
1. public class Venus {
2. public static void main(String[] args) {
3. int [] x = \{1,2,3\};
4. int y[] = \{4,5,6\};
5. new Venus().go(x,y);
6. }
7. void go(int[]... z) {
8. for(int[] a : z)
9. System.out.print(a[0]);
10. }
11. } What is the result?
A. 1
B. 12
C. 14
```

- D. 123
- E. Compilation fails.
- F. An exception is thrown at runtime.

Question:25

Which two code fragments correctly create and initialize a static array of int elements? (Choose two.)

- A. static final int[] $a = \{ 100,200 \};$
- B. static final int[] a; static { a=new int[2]; a[0]=100; a[1]=200; }
- C. static final int[] $a = \text{new int}[2]\{100,200\};$
- D. static final int[] a; static void init() { $a = \text{new int}[3]; a[0]=100; a[1]=200; }$



