1. Given:

public class Mutant {

public static void main(String[] args) {

StringBuilder sb = new StringBuilder("abc");

String s = "abc";

sb.reverse().append("d");

s.toUpperCase().concat("d");

System.out.println("." + sb + ". ." + s + ".");

}

}

Which two substrings will be included in the result? (Choose two.)

A. .abc.

B. .ABCd.

C. .ABCD.

D. .cbad.

E. .dcba.

**2.** Given:

public class Hilltop {

public static void main(String[] args) {

String[] horses = new String[5];

horses[4] = null;

for(int i = 0; i < horses.length; i++) {

if(i < args.length)

horses[i] = args[i];

System.out.print(horses[i].toUpperCase() + " ");

}

}

}

And, if the code compiles, the command line:

java Hilltop eyra vafi draumur kara

What is the result?

A. EYRA VAFI DRAUMUR KARA

B. EYRA VAFI DRAUMUR KARA null

C. An exception is thrown with no other output

D. EYRA VAFI DRAUMUR KARA, and then a NullPointerException

E. EYRA VAFI DRAUMUR KARA, and then an ArrayIndexOutOfBoundsException

F. Compilation fails

**3.** Given:

public class Actors {

public static void main(String[] args) {

char[] ca = {0x4e, \u004e, 78};

System.out.println((ca[0] == ca[1]) + " " + (ca[0] == ca[2]));

}

}

What is the result?

A. true true

B. true false

C. false true

D. false false

E. Compilation fails

**4.** Given:

1. class Dims {

2. public static void main(String[] args) {

3. int[][] a = {{1,2}, {3,4}};

4. int[] b = (int[]) a[1];

5. Object o1 = a;

6. int[][] a2 = (int[][]) o1;

7. int[] b2 = (int[]) o1;

8. System.out.println(b[1]);

9. } }

public class Tailor {

public static void main(String[] args) {

byte[][] ba = {{1,2,3,4}, {1,2,3}};

System.out.println(ba[1].length + " " + ba.length);

}

}

What is the result?

A. 2 4

B. 2 7

C. 3 2

D. 3 7

E. 4 2

F. 4 7

G. Compilation fails

**8.** Given:

3. public class Theory {

4. public static void main(String[] args) {

5. String s1 = "abc";

6. String s2 = s1;

7. s1 += "d";

8. System.out.println(s1 + " " + s2 + " " + (s1==s2));

9.

10. StringBuilder sb1 = new StringBuilder("abc");

11. StringBuilder sb2 = sb1;

12. sb1.append("d");

13. System.out.println(sb1 + " " + sb2 + " " + (sb1==sb2));

14. }

15. }

Given:

public class Mounds {

public static void main(String[] args) {

StringBuilder sb = new StringBuilder();

String s = new String();

for(int i = 0; i < 1000; i++) {

s = " " + i;

sb.append(s);

}

// done with loop

}

}

If the garbage collector does NOT run while this code is executing, approximately how many

objects will exist in memory when the loop is done?

A. Less than 10

B. About 1000

C. About 2000

D. About 3000

E. About 4000

Given:

public abstract interface Frobnicate { public void twiddle(String s); }

Which is a correct class? (Choose all that apply.)

A. public abstract class Frob implements Frobnicate {

public abstract void twiddle(String s) { }

}

B. public abstract class Frob implements Frobnicate { }

C. public class Frob extends Frobnicate {

public void twiddle(Integer i) { }

}

D. public class Frob implements Frobnicate {

public void twiddle(Integer i) { }

}

E. public class Frob implements Frobnicate {

public void twiddle(String i) { }

public void twiddle(Integer s) { }

}

**2.** Given:

class Top {

public Top(String s) { System.out.print("B"); }

}

public class Bottom2 extends Top {

public Bottom2(String s) { System.out.print("D"); }

public static void main(String [] args) {

new Bottom2("C");

System.out.println(" ");

}

}

What is the result?

A. BD

B. DB

C. BDC

D. DBC

E. Compilation fails

Given:

class Clidder {

private final void flipper() { System.out.println("Clidder"); }

}

public class Clidlet extends Clidder {

public final void flipper() { System.out.println("Clidlet"); }

public static void main(String [] args) {

new Clidlet().flipper();

}

}

What is the result?

A. Clidlet

B. Clidder

C. Clidder

Clidlet

D. Clidlet

Clidder

E. Compilation fails

Given:

class Bird {

{ System.out.print("b1 "); }

public Bird() { System.out.print("b2 "); }

}

class Raptor extends Bird {

static { System.out.print("r1 "); }

public Raptor() { System.out.print("r2 "); }

{ System.out.print("r3 "); }

static { System.out.print("r4 "); }

}

class Hawk extends Raptor {

public static void main(String[] args) {

System.out.print("pre ");

new Hawk();

System.out.println("hawk ");

}

}

What is the result?

A. pre b1 b2 r3 r2 hawk

B. pre b2 b1 r2 r3 hawk

C. pre b2 b1 r2 r3 hawk r1 r4

D. r1 r4 pre b1 b2 r3 r2 hawk

E. r1 r4 pre b2 b1 r2 r3 hawk

F. pre r1 r4 b1 b2 r3 r2 hawk

G. pre r1 r4 b2 b1 r2 r3 hawk

H. The order of output cannot be predicted

I. Compilation fails

Given the following:

1. class X { void do1() { } }

2. class Y extends X { void do2() { } }

3.

4. class Chrome {

5. public static void main(String [] args) {

6. X x1 = new X();

7. X x2 = new Y();

8. Y y1 = new Y();

9. // insert code here

10. } }

Which of the following, inserted at line 9, will compile? (Choose all that apply.)

A. x2.do2();

B. (Y)x2.do2();

C. ((Y)x2).do2();

D. None of the above statements will compile

**7.** Given:

public class Locomotive {

Locomotive() { main("hi"); }

public static void main(String[] args) {

System.out.print("2 ");

}

public static void main(String args) {

System.out.print("3 " + args);

}

}

What is the result? (Choose all that apply.)

A. 2 will be included in the output

B. 3 will be included in the output

C. hi will be included in the output

D. Compilation fails

E. An exception is thrown at runtime

Given:

3. class Dog {

4. public void bark() { System.out.print("woof "); }

5. }

6. class Hound extends Dog {

7. public void sniff() { System.out.print("sniff "); }

8. public void bark() { System.out.print("howl "); }

9. }

10. public class DogShow {

11. public static void main(String[] args) { new DogShow().go(); }

12. void go() {

13. new Hound().bark();

14. ((Dog) new Hound()).bark();

15. ((Dog) new Hound()).sniff();

16. }

17. }

What is the result? (Choose all that apply.)

A. howl howl sniff

B. howl woof sniff

C. howl howl followed by an exception

D. howl woof followed by an exception

E. Compilation fails with an error at line 14

F. Compilation fails with an error at line 15

Given:

3. class Mammal {

4. String name = "furry ";

5. String makeNoise() { return "generic noise"; }

6. }

7. class Zebra extends Mammal {

8. String name = "stripes ";

9. String makeNoise() { return "bray"; }

10. }

11. public class ZooKeeper {

12. public static void main(String[] args) { new ZooKeeper().go(); }

13. void go() {

14. Mammal m = new Zebra();

15. System.out.println(m.name + m.makeNoise());

16. }

17. }

What is the result?

A. furry bray

B. stripes bray

C. furry generic noise

D. stripes generic noise

E. Compilation fails

F. An exception is thrown at runtime

What is the output of below code

public class Prg4 {

public static void main(String[] args) {

// TODO Auto-generated method stub

String[] table = {"aa", "bb", "cc"};

for (String ss: table) {

int i = 0;

while (i < table.length) {

System.out.println(ss + ", " + i);

i++;

}

}

}

}

Write the output

public class Prg2 {

public static void main(String[] args) {

// TODO Auto-generated method stub

int[] nums= new int[6];

int [] [] array2D = {{0, 1, 2}, {3, 4, 5, 6}};

System.out.print (array2D[0].length+ "" );

System.out.print(array2D[1].getClass(). isArray() + "");

System.out.println (array2D[0][1]);

}

}