

1,

Given:

```
35. String #name = "Jane Doe";  
36. int $age = 24;  
37. Double _height = 123.5;  
38. double ~temp = 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.

Answer:

2,

Given:

```
1. public class TestString1{  
2.   public static void main(String[] args){  
3.       String str = "420";  
4.       str += 42;  
5.       System.out.print(str);  
6.   }  
7. }
```

What is the output?

- A. 42
- B. 420
- C. 462
- D. 42042
- E. Compilation fails.
- F. An exception is thrown at runtime.

Answer:

3,

Given:

```
1. public class returnIt {  
2.   returnType methodA(byte x, double y){  
3.   return (short) x/y * 2;  
4.   }
```

5. }

What is the valid returnType for methodA in line 2?

- A. int
- B. byte
- C. long
- D. short
- E. float
- F. double

Answer

4, Given:

```
1. public class Test{  
2.     public static void main(String[] args){  
3.         int x = 5;  
4.         boolean b1 = true;  
5.         boolean b2 = false;  
6.         if((x==4) && !b2)  
7.             System.out.print("1 ");  
8.             System.out.print("2 ");  
9.         if((b2=true) && b1)  
10.            System.out.print("3 ");  
11.     }  
12. }
```

What is the result?

- A. 2
- B. 3
- C. 12
- D. 23
- E. 123
- F. Compilation fails.
- G. An exception is thrown at runtime.

Answer:

5, Given:

```
22. public void go(){  
23.     String o = "";  
24.     z:
```

```

25. for(int x=0; x<3; x++){
26.     for(int y=0; y<2; y++){
27.         if(x == 1) break;
28.         if(x==2 && y==1) break z;
29.         o = o + x + y;
30.     }
31. }
32. System.out.println(o);
33.}

```

What is the result when the go() method is invoked?

- A. 00
- B. 0001
- C. 000120
- D. 00012021
- E. Compilation fails.
- F. An exception is thrown at runtime.

Answer:

6,

Given:

```

10. int x=0;
11. int y=10;
12. do{
13.     y--;
14.     ++x;
15. }while(x < 5);
16. System.out.print(x + "," + y);

```

What is the result?

- A. 5,6
- B. 5,5
- C. 6,5
- D. 6,6

Answer:

7,

Given:

```

1. int i=1,j=10;

```

```

2. do{
3.     if(i++>--j) continue;
4. }while(i<5);

```

After Execution, what are the value for i and j?

- A. i=6 j=5
- B. i=5 j=5
- C. i=6 j=4
- D. i=5 j=6
- E. i=6 j=6

Answer:

8,

Given:

```

1. public class Spock{
2.     public static void main(String[] args){
3.         Long tail = 2000L;
4.         Long distance = 1999L;
5.         Long story = 1000L;
6.         if((tail>distance) ^ ((story*2)==tail))
7.             System.out.print("1");
8.         if((distance+1 != tail) ^ ((story*2)==distance))
9.             System.out.print("2");
10.    }
11.}

```

What is the result?

- A. 1
- B. 2
- C. 12
- D. Compilation fails.
- E. No output is produced.
- F. An exception is thrown at runtime.

Answer:

9,

Given:

```

1. public class SwitchTest{

```

```
2. public static void main(String[] args){
3.     System.out.println("value="+switchIt(4));
4. }
5. public static int switchIt(int x){
6.     int j=1;
7.     switch(x){
8.         case 1: j++;
9.         case 2: j++;
10.        case 3: j++;
11.        case 4: j++;
12.        case 5: j++;
13.        default: j++;
14.    }
15.    return j+x;
16. }
17.}
```

what is the output from line 3?

- A. value=3
- B. value=4
- C. value=5
- D. value=6
- E. value=7
- F. value=8

Answer:

10,

Given:

```
11. String[] elements = {"for", "tea", "too"};
12. String first = (elements.length>0) ? elements[0] : null;
```

What is the result?

- A. Compilation fails.
- B. An exception is thrown at runtime.
- C. The variable first is set to null.
- D. The variable first is set to elements[0].

Answer:

11,

Given:

```
1. public class Foo{
2.     public static void main(String args[]){
3.         try{return;}
4.         finally{ System.out.println("Finally");}
5.     }
6. }
```

what is the result?

- A. The program runs and prints nothing.
- B. The program runs and prints "Finally".
- C. The code compiles, but an exception is thrown at runtime.
- D. The code will not compile because the catch block is missing.

Answer:

12,

Given:

```
1. class EnclosingOne{
2.     public class InsideOne{}
3. }
4. public class InnerTest{
5.     public static void main(String args[]){
6.         EnclosingOne eo=new EnclosingOne();
7.         //insert code here
8.     }
9. }
```

Which is the code can be insert?

- A. InsideOne ei=eo.new InsideOne();
- B. eo.InsideOne ei=eo.new InsideOne();
- C. InsideOne ei=EnclosingOne.new InsideOne();
- D. InsideOne ei=eo.new InsideOne();
- E. EnclosingOne.InsideOne ei=eo.new InsideOne();

13,

Given:

```
class BaseClass{
    private float x=1.0f;
    private float getVar(){return x;}
}
class SubClass extends BaseClass{
    private float x=2.0f;
    //insert code
}
```

what are true to override getVar()? (choose three)

- A.float getVar(){
- B.public float getVar(){
- C.public double getVar(){
- D.protected float getVar(){
- E.public float getVar(float f){

14,

Given:

```
1. public class SyncTest {
2.     private int x;
3.     private int y;
4.     private synchronized void setX (int i) {x=i;}
5.     private synchronized void setY (int i) {y=i ;}
6.     public void setXY(int i){set X(i); setY(i);}
7.     public synchronized Boolean check() (return x !=y;)
8. }
```

Under which conditions will check () return true when called from a different class?

- A. Check() can never return true
- B. Check() can return true when setXY is called by multiple threads
- C. Check() can return true when multiple threads call setX and setY separately.
- D. Check() can only return true if SyncTest is changed to allow x and y to be set separately.

15, 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.print(y[2][1]);  
6. }  
7. }
```

What is the result?

- A. 2
- B. 3
- C. 4
- D. 6
- E. 7
- F. Compilation fails.

16, Given:

```
11. class Person{  
12.     String name = "No name";  
13.     public Person(String nm){name = nm;}  
14. }  
15.  
16. class Employee extends Person{  
17.     String empID = "0000";  
18.     public Employee(String id){empID = id;}  
19. }  
20.  
21. class EmployeeTest{  
22.     public static void main(String[] args){  
23.         Employee e = new Employee("4321");  
24.         System.out.println(e.empID);  
25.     }  
26. }
```

What is the result?

- A. 4321
- B. 0000
- C. An exception is thrown at runtime.
- D. Compilation fails because of an error in line 18.

17,

Given:

```
5. class Atom{  
6.     Atom(){System.out.print("atom ");}
```



```
7. }  
8. class Rock extends Atom{  
9.   Rock(String type){System.out.print(type);}  
10. }  
11. public class Mountain extends Rock{  
12.   Mountain(){  
13.     super("granite ");  
14.     new Rock("granite ");  
15.   }  
16.   public static void main(String[] a){new Mountain();}  
17. }
```

What is the result?

- A. Compilation fails.
- B. atom granite
- C. granite granite
- D. atom granite granite
- E. An exception is thrown at runtime.
- F. atom granite atom granite

18,

Given:

```
1. class Batman{  
2.   int squares = 81;  
3.   public static void main(String[] args){  
4.     new Batman().go();  
5.   }  
6.   void go(){  
7.     incr(++squares);  
8.     System.out.println(squares);  
9.   }  
10.  void incr(int squares){squares += 10;}  
11. }
```

What is the result?

- A. 81
- B. 82
- C. 91

D. 92

E. Compilation fails.

F. An exception is thrown at runtime.

19,

Given:

```
1. class Pass{
2.   public static void main(String[] args){
3.     int x = 5;
4.     Pass p = new Pass();
5.     p.doStuff(x);
6.     System.out.print(" main x = " + x);
7.   }
8.   void doStuff(int x){
9.     System.out.println(" doStuff x = " + x++);
10.  }
11. }
```

What is the result?

A. Compilation fails.

B. An exception is thrown at runtime.

C. doStuff x = 6 main x = 6

D. doStuff x = 5 main x = 5

E. doStuff x = 5 main x = 6

F. doStuff x = 6 main x = 5

20,

Given:

```
1. class Plant{
2.   private String name;
3.   public Plant(String name){this.name = name;}
4.   public String getName(){return name;}
5. }
6. public class Tree extends Plant{
7.   public void growFruit(){
8.   public void dropLeaves(){
9. }
```

What statement is true?

- A. The code will compile without changes.
- B. The code will compile if `public Tree(){Plant();}` is added to the Tree class.
- C. The code will compile if `public Plant(){Tree();}` is added to the Plant class.
- D. The code will compile if `public Plant(){this("fern");}` is added to the Plant class.
- E. The code will compile if `public Plant(){Plant("fern");}` is added to the Plant class.

21,

Given:

```

1. public abstract class Shape{
2.     private int x;
3.     private int y;
4.     public abstract void draw();
5.     public void setAnchor(int x, int y){
6.         this.x = x;
7.         this.y = y;
8.     }
9. }
```

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

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

```
private in radius;
public void draw(){/* code here */}
}
```

22,

Given:

```
1. package test;
2.
3. class Target{
4.     public String name = "hello";
5. }
```

What can directly access and change the value of the variable name?

- A. any class
- B. only the Target class
- C. any class in the test package
- D. any class that extends Target

Answer:

23,

Given:

```
11. abstract class Vehicle{public int speed(){return 0;}}
12. class Car extends Vehicle{public int speed(){return 60;}}
13. class RaceCar extends Car{public int speed(){return 150;}}
...
21. RaceCar racer = new RaceCar();
22. Car car = new RaceCar();
23. Vehicle vehicle = new RaceCar();
24. System.out.println(racer.speed() + ", " + car.speed()
25. + ", " + vehicle.speed());
```

what is the result?

- A. 0, 0, 0
- B. 150, 60, 0
- C. Compilation fails.
- D. 150, 150, 150
- E. An exception is thrown at runtime.

24,

Given:

```

10. interface Foo{}
11. class Alpha implements Foo{}
12. class Beta extends Alpha{}
13. class Delta extends Beta{
14.     public static void main(String[] args){
15.         Beta x = new Beta();
16.         //insert code here
17.     }
18. }

```

Which code, inserted at line 16, will cause a java.lang.ClassCastException?

- A. Alpha a = x;
- B. Foo f = (Delta)x;
- C. Foo f = (Alpha)x;
- D. Beta b = (Beta)(Alpha)x;

25,

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
- C. protected

26,

Given:

```

11. public interface A{ public void m1(); }
13. class B implements A{ }
14. class C implements A{ public void m1(){} }
15. class D implements A{ public void m1(int x){} }

```

- ```

16. abstract class E implements A {}
17. abstract class F implements A { public void m1(){} }
18. abstract class G implements A { public void m1(int x){} }

```

What is the result?

- A. Compilation succeeds.
- B. Exactly one class does NOT compile.
- C. Exactly two classes do NOT compile.
- D. Exactly four classes do NOT compile.
- E. Exactly three classes do NOT compile.

27,

Given:

- ```

11. public static void test(String str){
12.     int check = 4;
13.     if(check == str.length()){
14.         System.out.print(str.charAt(check - 1) + ", ");
15.     }else{
16.         System.out.print(str.charAt(0) + ", ");
17.     }
18. }

```

and the invocation:

- ```

21. test("four");
22. test("tee");
23. test("to");

```

What is the result?

- A. r, t, t,
- B. r, e, o,
- C. Compilation fails.
- D. An exception is thrown at runtime.

28,

Given:

- ```

12. public class Test{
13.     public enum Dogs{collie, harrier};
14.     public static void main(String[] args){
15.         Dogs myDog = Dogs.collie; 16.         switch(myDog){

```

```
17.         case collie:
18.             System.out.print("collie ");
19.         case harrier:
20.             System.out.print("harrier ");
21.     }
22. }
23. }
```

What is the result?

- A. collie
- B. harrier
- C. Compilation fails.
- D. collie harrier
- E. An exception is thrown at runtime.

29,

Given:

```
10. public class Foo{
11.     static int[] a;
12.     static{ a[0] = 2;}
13.     public static void main( String[] args){}
14. }
```

Which exception or error will be thrown when a programmer attempts to run this code?
(Choose two.)

- A. java.lang.StackOverflowError
- B. java.lang.IllegalStateException
- C. java.lang.ExceptionInInitializerError
- D. java.lang.ArrayIndexOutOfBoundsException

30,

Given:

```
11. static void test() throws RuntimeException{
12.     try{
13.         System.out.print("test ");
14.         throw new RuntimeException();
15.     }
```

```
16.     catch(Exception ex){ System.out.print("exception ");}
17.  }
18.  public static void main(String[] args){
19.      try{test();}
20.      catch(RuntimeException ex){System.out.print("runtime ");}
21.      System.out.print("end ");
22.  }
```

What is the result?

- A. test end
- B. Compilation fails.
- C. test runtime end
- D. test exception end
- E. A Throwable is thrown by main at runtime.

31,

Given:

```
5.  import java.util.*;
6.  public class SortOf{
7.      public static void main(String[] args){
8.          ArrayList<Integer> a = new ArrayList<Integer>();
9.          a.add(1); a.add(5); a.add(3);
10.         Collections.sort(a);
11.         a.add(2);
12.         Collections.reverse(a);
13.         System.out.println(a);
14.     }
15. }
```

What is the result?

- A. [1, 2, 3, 5]
- B. [2, 1, 3, 5]
- C. [2, 5, 3, 1]
- D. [5, 3, 2, 1]
- E. [1, 3, 5, 2]
- F. Compilation fails.
- G. An exception is thrown at runtime.

32,

Given:

```
10. public class Starter extends Thread{
11.     private int x = 2;
12.     public static void main(String[] args) throws Exception{
13.         new Starter().makeItSo();
14.     }
15.     public Starter(){
16.         x = 5;
17.         start();
18.     }
19.     public void makeItSo() throws Exception{
20.         join();
21.         x = x - 1;
22.         System.out.println(x);
23.     }
24.     public void run(){x *= 2;}
25. }
```

What is the output if the main() method is run?

- A. 4
- B. 5
- C. 8
- D. 9
- E. Compilation fails.
- F. An exception is thrown at runtime.
- G. It is impossible to determine for certain.

33,

Given:

```
1. public class Threads4{
2.     public static void main(String[] args){
3.         new Threads4.go();
4.     }
```

```
5.    public void go(){
6.        Runnable r = new Runnable(){
7.            public void run(){
8.                System.out.print("foo");
9.            }
10.        };
11.    Thread t = new Thread(r);
12.    t.start();
13.    t.start();
14.    }
15. }
```

What is the result?

- A. Compilation fails.
- B. An exception is thrown at runtime.
- C. The code executes normally and prints "foo";
- D. The code executes normally, but nothing is printed.

34,

Given:

```
11. Runnable r = new Runnable(){
12.    public void run(){
13.        System.out.print("Cat");
14.    }
15. };
16. Thread t = new Thread(r){
17.    public void run(){
18.        System.outprint("Dog");
19.    }
20. };
21. t.start();
```

What is the result?

- A. Cat
- B. Dog
- C. Compilation fails.
- D. The code runs with no output.
- E. An exception is thrown at runtime.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34						