

Java: Classes and Methods -I

Quiz

Question 1

```
public class Person{  
    private void secret() {  
        private String msg="Hello"; // line 2  
        System.out.println(msg) ;  
    }  
  
    public static void main(String str[]){  
        new Person().secret(); //line 1  
    }  
}
```

- A. Code prints: Hello
- B. Code prints nothing
- C. Compilation error occurs at line marked 1
- D. Compilation error occurs₂ at line marked 2

Question 1

```
public class Person{  
    private void secret() {  
        private String msg="Hello"; // line 2  
        System.out.println(msg) ;  
    }  
  
    public static void main(String str[]){  
        new Person().secret(); //line 1  
    }  
}
```

- A. Code prints: Hello
- B. Code prints nothing
- C. Compilation error occurs at line marked 1
- ☒ D. Compilation error occurs₃ at line marked 2

Question 2

```
public class A {  
    public static void main(String[] args) {  
        int i=10; int j=20;  
        System.out.print(i + j + " " + i + j);  
    }  
}
```

What is the result of attempting to compile and run the program?

- A. Prints 10201020
- B. Prints 301020
- C. Prints 3030
- D. Prints: 102030

Question 2

```
public class A {  
    public static void main(String[] args) {  
        int i=10; int j=20;  
        System.out.print(i + j + " " + i + j);  
    }  
}
```

What is the result of attempting to compile and run the program?

- A. Prints 10201020
- ☒ B. Prints 301020
- C. Prints 3030
- D. Prints: 102030

Question 3

```
public class Person{  
    public String name;  
    public static void main(String str[]){  
        Person p=null;  
        System.out.print(p instanceof Person) ;  
    }  
}
```

What is the result of compilation or execution of the code?

- A. Prints **false**
- B. Prints **true**
- C. Results in compilation error
- D. Results in runtime error

Question 3

```
public class Person{  
    public String name;  
    public static void main(String str[]){  
        Person p=null;  
        System.out.print(p instanceof Person) ;  
    }  
}
```

What is the result of compilation or execution of the code?

- ☒ A. Prints **false**
- ☐ B. Prints **true**
- ☐ C. Results in compilation error
- ☐ D. Results in runtime error

Question 4

“There is exactly one copy of this variable in existence, regardless of how many times the class has been instantiated.”

The statement above is referring to

- A. Local variable
- B. Global variable
- C. Instance variable
- D. static variable

Question 4

“There is exactly one copy of this variable in existence, regardless of how many times the class has been instantiated.”

The statement above is referring to

- A. Local variable
- B. Global variable
- C. Instance variable
- ☒ D. static variable

Question 5

```
1. public class Person{  
2.     private String name;  
3.     public static void main(String str[]) {  
4.         Person p=new Person();  
5.         _____  
6.         System.out.print(p.name);  
7.     }}
```

What statement can be put in line 5 so that the code prints “Rita”?

- A. `p.name="Rita";`
- B. `p.setName("Rita");`
- C. `name="Rita";`
- D. None of the above

Question 5

```
1. public class Person{  
2.     private String name;  
3.     public static void main(String str[]) {  
4.         Person p=new Person();  
5.         _____  
6.         System.out.print(p.name);  
7.     } }
```

What statement can be put in line 5 so that the code prints “Rita”?

- ☒ A. `p.name="Rita";`
- ☐ B. `p.setName("Rita");`
- ☐ C. `name="Rita";`
- ☐ D. None of the above

Question 6

```
. public class Test{  
    public static int m1(int x) {return ++x;}  
    public static void main (String[] args) {  
        int x = 1;  
        int y = m1(x) ;  
        System.out.println(x + "," + y) ;  
    }  
}
```

What is the result of attempting to compile and run the program?

- A. prints 1,2
- B. prints 1,1
- C. Compilation error. m1() cannot be called without Test instance
- D. Prints nothing

Question 6

```
. public class Test{  
    public static int m1(int x) {return ++x;}  
    public static void main (String[] args) {  
        int x = 1;  
        int y = m1(x) ;  
        System.out.println(x + "," + y) ;  
    }  
}
```

What is the result of attempting to compile and run the program?

- ☒ A. prints 1,2
- ☐ B. prints 1,1
- ☐ C. Compilation error. m1() cannot be called without Test instance
- ☐ D. Prints nothing

Question 7

```
public class A {  
    public A() {}           // 1  
    private int A;         // 2  
    public void A() {}     // 3  
}
```

Which line causes compilation error?

- A. Line marked 1 because method does not have return type.
- B. Line marked 2 because member variable name and class name clash
- C. Line marked 3 because method name is same as the class name
- D. There is no compilation error anywhere

Question 7

```
public class A {  
    public A() {}           // 1  
    private int A;         // 2  
    public void A() {}     // 3  
}
```

Which line causes compilation error?

- A. Line marked 1 because method does not have return type.
- B. Line marked 2 because member variable name and class name clash
- C. Line marked 3 because method name is same as the class name
- ☒ D. There is no compilation error anywhere

Question 8

```
public class Test{  
    private static int x=1;  
    public static void m1(int i) {x+=i; i++;}  
    public static void main (String[] args) {  
        int y=1;  
        m1(y) ;  
        System.out.println(x + "," + y) ; }}
```

What is the result of attempting to compile and run the program?

- A. prints 1,2
- B. prints 2,1
- C. Prints 1,1
- D. Prints 2,2

Question 8

```
public class Test{  
    private static int x=1;  
    public static void m1(int i) {x+=i; i++;}  
    public static void main (String[] args) {  
        int y=1;  
        m1(y) ;  
        System.out.println(x + "," + y) ; }}
```

What is the result of attempting to compile and run the program?

- A. prints 1,2
- ☒ B. prints 2,1
- C. Prints 1,1
- D. Prints 2,2

Question 9

Which of the following is false?

- A. Class name and constructor name must be same
- B. Constructor does not have return type
- C. Constructor must be **public**
- D. Constructor cannot be **static**

Question 9

Which of the following is false?

- A. Class name and constructor name must be same
- B. Constructor does not have return type
- ☒ C. Constructor must be **public**
- D. Constructor cannot be **static**

Question 10

```
public class A {  
    public static void main(String[] args) {  
        int[] matrix1[]={1,1},{1,1},{1,1}};  
        int[] matrix2[]={2,2,2,2,2,2}};  
        System.out.print(matrix1.length) ;  
        System.out.println(" "+matrix2.length) ;  
    }  
}
```

What is the result of compilation and execution of the code?

- A. 2 6
- B. 3 1
- C. 2 1
- D. Compilation error

Question 10

```
public class A {  
    public static void main(String[] args) {  
        int[] matrix1[]={1,1},{1,1},{1,1}};  
        int[] matrix2[]={2,2,2,2,2,2}};  
        System.out.print(matrix1.length) ;  
        System.out.println(" "+matrix2.length) ;  
    }  
}
```

What is the result of compilation and execution of the code?

A. 2 6

☒ B. 3 1

C. 2 1

D. Compilation error

Question 11

Assume the below give code snippet.

```
15. String a=new String ();
```

```
16. String b=new String ();
```

```
17. String c=new String ();
```

```
18. String d=new String ();
```

```
19. d=c=b=a;
```

```
20. d=null;
```

At the end of line 20, how many objects are eligible for garbage collection?

A. 1

B. 2

C. 3

D. 4

Question 11

Assume the below give code snippet.

```
15. String a=new String ();
```

```
16. String b=new String ();
```

```
17. String c=new String ();
```

```
18. String d=new String ();
```

```
19. d=c=b=a;
```

```
20. d=null;
```

At the end of line 20, how many objects are eligible for garbage collection?

A. 1

B. 2

☒ C. 3

D. 4

Question 12

```
public class Test1 {  
    public static void main(String[] args) {  
        int[]a1[] = {{1,2},{3,4,5},{6,7,8,9},{}};  
        for (int i = 0; i < a1.length; i++) {  
            System.out.print(a1[i].length+",");  
        }  
    }  
}
```

What is the result of attempting to compile and run the program?

- A. Prints: 2,3,4,0,
- B. Prints: 1,2,5,0,
- C. Compile-time error
- D. Run-time error

Question 12

```
public class Test1 {  
    public static void main(String[] args) {  
        int[]a1[] = {{1,2},{3,4,5},{6,7,8,9},{}};  
        for (int i = 0; i < a1.length; i++) {  
            System.out.print(a1[i].length+",");  
        }  
    }  
}
```

What is the result of attempting to compile and run the program?

- ☒ A. Prints: 2,3,4,0,
- ☐ B. Prints: 1,2,5,0,
- ☐ C. Compile-time error
- ☐ D. Run-time error

Question 13

Given the following,

```
public class CommandArgs {  
    public static void main(String [] args) {  
        String s1 = args[1];    String s2 = args[2];  
        System.out.print(s1 + s2);    }    }
```

The code is compiled and execute using the following command

java CommandArgs 1 2 3 4 . What will be displayed?

- A. 12
- B. 23
- C. 5
- D. nothing

Question 13

Given the following,

```
public class CommandArgs {  
    public static void main(String [] args) {  
        String s1 = args[1];    String s2 = args[2];  
        System.out.print(s1 + s2);    }    }
```

The code is compiled and execute using the following command

`java CommandArgs 1 2 3 4` . What will be displayed?

A. 12

☒ B. 23

C. 5

D. nothing

Question 14

```
int a[] = {1,2,3,4,5};  
for( ____ )  
System.out.println(j);
```

What needs to be filled in order to print the content of the array?

- A. j:a
- B. int j:a
- C. a:int j
- D. int a:j

Question 14

```
int a[] = {1,2,3,4,5};  
for( ____ )  
System.out.println(j);
```

What needs to be filled in order to print the content of the array?

A. j:a

☒ B. int j:a

C. a:int j

D. int a:j

Question 15

What is the result of compiling and executing the code?

```
public class A {  
    static String s1;  
    static String s2;  
  
    public static void main(String args[]) {  
        s2 = s1+s2;  
  
        System.out.println(s2) ;  
    } }
```

- A. Prints nullnull
- B. Compilation error
- C. NullPointerException is thrown at runtime
- D. Prints nothing

Question 15

What is the result of compiling and executing the code?

```
public class A {  
    static String s1;  
    static String s2;  
  
    public static void main(String args[]) {  
        s2 = s1+s2;  
  
        System.out.println(s2);  
    } }
```

- ☒ A. Prints nullnull
- ☐ B. Compilation error
- ☐ C. NullPointerException is thrown at runtime
- ☐ D. Prints nothing

Question 16

- Assume the below give code snippet.

15. `String a="1";`

16. `String b="1";`

17. `String c="1";`

18. `String d="1";`

19. `d=c=b=a;`

20. `d=null;`

At the end of line 20, how many instances are destroyed.

- A. 1
- B. 2
- C. 3
- D. none

Question 16

- Assume the below give code snippet.

15. `String a="1";`

16. `String b="1";`

17. `String c="1";`

18. `String d="1";`

19. `d=c=b=a;`

20. `d=null;`

At the end of line 20, how many instances are destroyed.

A. 1

B. 2

C. 3

☒ D. none

Question 17

```
public class B{  
    public static void main(String[] args) {  
        final String a[]; //line 1  
        a= args; //line 2  
        a[0]="a"; //line 3  
        a[3]="b"; //line 4  
        a=new String[2]; //line 5  
    }  
}
```

Which of the following statements are true?

- A. Line 1 gives compilation error
- B. Line 2 gives compilation error
- C. Line 4 will throw an runtime error
- D. Line 5 gives compilation error

Question 17

```
public class B{  
    public static void main(String[] args) {  
        final String a[]; //line 1  
        a= args; //line 2  
        a[0]="a"; //line 3  
        a[3]="b"; //line 4  
        a=new String[2]; //line 5  
    }  
}
```

Which of the following statements are true?

- A. Line 1 gives compilation error
- B. Line 2 gives compilation error
- ☒ C. Line 3 will throw runtime error
- ☒ D. Line 5 gives compilation error