

## **Sun Certified Programmer for the Java Platform, Standard Edition 6**

## Exam A

### QUESTION 1

You want to print 'Yes' if a character primitive contains 0 or 1 and 'No' if it contains 2 or more. Which of the given code fragments correctly achieve this? (Select all that apply)

- A. 

```
if (c=='0' || c=='1')
    System.out.println("Yes");
else if (c >= '2')
    System.out.println("No");
```
- B. 

```
if (c=='0' && c=='1')
    System.out.println("Yes");
else if (c >= '2')
    System.out.println("No");
```
- C. 

```
if (c='0' || c='1')
    System.out.println("Yes");
else if (c >= '2')
    System.out.println("No");
```
- D. 

```
if (c=="0" || c=="1")
    System.out.println("Yes");
else if (c >= "2")
    System.out.println("No");
```

**Correct Answer:** A

### QUESTION 2

Which of the given code fragments will compile correctly?

- A. 

```
int i = 1;
if (i)
    System.out.println("Hello");
```
- B. 

```
boolean a = true;
if (a=true)
    System.out.println("Hello");
```
- C. 

```
int i = 1;
if (i=1)
    System.out.println("Hello");
```
- D. 

```
float f = (float)1.0;
if (f==5.0f)
    System.out.println("Hello");
```

**Correct Answer:** BD

### QUESTION 3

Given:

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

What is the result?

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

**Correct Answer:** D

### QUESTION 4

Given:

```
int x = 12;
```

```

while (x < 10) {
    x--;
}
System.out.println(x);

```

What is the result?

- A. 0
- B. 10
- C. 12
- D. Infinite loop. Never prints a value

**Correct Answer: C**

### QUESTION 5

Given:

```

public static void main(String[] args) {
    for(int i= 0; i <= 10; i++) {
        if (i > 6)
            break;
    }
    System.out.println(i);
}

```

What is the result?

- A. 6
- B. 7
- C. 10
- D. 11
- E. Compilation fails

**Correct Answer: E**

### QUESTION 6

Given:

```

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

```

What is the result?

- A. 2
- B. 3
- C. 1 2
- D. 2 3
- E. 1 2 3
- F. Compilaton fails

G. An exception is thrown at runtime

**Correct Answer:** D

### QUESTION 7

Given:

```
public class ClassA {  
    public static void main(String[] args){  
        int value=0;  
        boolean setting = true;  
        String title="Hello";  
        if (value || (setting && title == "Hello"))  
            System.out.println(1);  
        if (value == 1 & title.equals("Hello"))  
            System.out.println(2);  
        }  
}
```

What is the result?

- A. 1
- B. 2
- C. Compilation fails
- D. The code runs with no output
- E. An exception is thrown at runtime

**Correct Answer:** C

### QUESTION 8

Given:

```
11. public static void test(String str) {  
12.     if(str == null | str.length() == 0) {  
13.         System.out.println("String is empty");  
14.     } else {  
15.         System.out.println("String is not empty");  
16.     }  
17. }
```

And the invocation:

```
31. test(null);
```

What is the result?

- A. An exception is thrown at runtime
- B. "String is empty" is printed to output
- C. Compilation fails because of an error in line 12.
- D. "String is not empty" is printed to output.

**Correct Answer:** A

### QUESTION 9

Given the following code:

```
double score = 0.70;  
  
if (score > 0)  
    if (score < 0.65)  
        System.out.println("You don't pass the exam!!!");  
else  
    System.out.println("You pass the exam!!!");
```

What is the result?

- A. Compilation fails
- B. An exception is thrown at runtime.
- C. You pass the exam!!
- D. You don't pass the exam!!
- E. None

**Correct Answer: C**

#### QUESTION 10

Given the following code:

```
double score = 0.70;  
  
if (score > 0)  
if (score < 0.65)  
System.out.println("You don't pass the exam!!");  
else System.out.println("You pass the exam!!");
```

What is the result?

- A. Compilation fails
- B. An exception is thrown at runtime.
- C. You pass the exam!!
- D. You don't pass the exam!!
- E. None

**Correct Answer: C**

#### QUESTION 11

Given the following code and assume that doStuff() returns true:

```
int y = 5;  
int x = 2;  
  
if ( ( (x > 3) && (y < 2) ) | doStuff() )  
{  
    System.out.println("true");  
}  
else  
{  
    System.out.println("false");  
}
```

What is the result?

- A. Compilation fails
- B. An exception is thrown at runtime.
- C. true
- D. false

**Correct Answer: C**

#### QUESTION 12

Given the following code and assume that doStuff() returns true:

```
int y = 5;  
int x = 2;
```

```

if ( (x > 3) && (y < 2) | doStuff() )
{
    System.out.println("true");
}
else
{
    System.out.println("false");
}

```

What is the result?

- A. Compilation fails
- B. An exception is thrown at runtime.
- C. true
- D. false

**Correct Answer: D**

### QUESTION 13

Given the following code:

```

int x = 1;

switch(x)
{
    case 1: System.out.println("x is one");
    case 2: System.out.println("x is two");
    case 3: System.out.println("x is three");
}

System.out.println("out of the switch");

```

What is the output?

- A. Compilation fails
- B. An exception is thrown at runtime.
- C. x is one  
x is two  
x is three  
out of the switch
- D. x is one  
out of the switch

**Correct Answer: C**

### QUESTION 14

Given the following code:

```

long x = 1;

switch(x)
{
    case 1: System.out.println("x is one"); break;
    case 2: System.out.println("x is two"); break;
    case 3: System.out.println("x is three"); break;
}

System.out.println("out of the switch");

```

What is the output?

- A. Compilation fails
- B. An exception is thrown at runtime.
- C. x is one  
x is two  
x is three  
out of the switch
- D. x is one  
out of the switch

**Correct Answer:** A

#### QUESTION 15

Given the following code:

```
int x = 2;  
switch(x)  
{  
    case 2: System.out.println("2");  
    default: System.out.println("default");  
    case 3: System.out.println("3");  
    case 4: System.out.println("4");  
}
```

What is the output?

- A. Compilation fails
- B. An exception is thrown at runtime.
- C. 2  
default  
3  
4
- D. 2

**Correct Answer:** C

#### QUESTION 16

Given the following code:

```
int x = 7;  
switch(x)  
{  
    case 2: System.out.println("2");  
    default: System.out.println("default");  
    case 3: System.out.println("3");  
    case 4: System.out.println("4");  
}
```

What is the output?

- A. Compilation fails
- B. An exception is thrown at runtime.
- C. default
- D. default  
3  
4

**Correct Answer:** D

#### QUESTION 17

Given the following code:

```
int b = 3;
for (int a = 1; b != 1; System.out.println("iterate"))
{
    b = b - a;
}
```

What is the output?

- A. Compilation fails
- B. An exception is thrown at runtime
- C. None
- D. iterate  
iterate

**Correct Answer:** D

### QUESTION 18

Given the following code:

```
for (int i = 0; i < 10; i++)
{
    if (i == 5)
        continue;
    System.out.print(i);
}
```

What is the output?

- A. Compilation fails
- B. An exception is thrown at runtime
- C. 0123456789
- D. 012346789

**Correct Answer:** D

### QUESTION 19

Given the following code:

```
boolean isTrue = true;

for (int i=0; i <5; i++)
{
    while(isTrue) {
        System.out.println("Hello");
        break;
    }
    System.out.println("Outer loop");
}
System.out.println("Good-Bye");
```

What is the output?

- A. Compilation fails
- B. An exception is thrown at runtime
- C. Hello  
Outer loop  
Hello  
Outer loop  
Hello  
Outer loop  
Hello  
Outer loop



- Hello
- Outer loop
- Good-Bye
- D. Hello
- Good-Bye

**Correct Answer:** C

#### QUESTION 20

Given the following code:

```
boolean isTrue = true;
```

```
outer:
```

```
for (int i=0; i <5; i++)  
{  
    while(isTrue) {  
        System.out.println("Hello");  
        break outer;  
    }  
    System.out.println("Outer loop");  
}  
System.out.println("Good-Bye");
```

What is the output?

- A. Compilation fails
- B. An exception is thrown at runtime
- C. Hello
- Outer loop
- Hello
- Outer loop
- Hello
- Outer loop
- Hello
- Outer loop
- Hello
- Outer loop
- Good-Bye
- D. Hello
- Good-Bye

**Correct Answer:** D

#### QUESTION 21

Given the following code:

```
for (int i=0; i<5; i++) {  
    for(int j=0; j<5; j++) {  
        System.out.println("Hello");  
        continue;  
    }  
    System.out.println("outer");  
}  
System.out.println("Good-Bye");
```

What is the output?

- A. Compilation fails
- B. An exception is thrown at runtime
- C. Hello
- Hello

Hello  
Hello  
Hello  
outer  
Hello  
Hello  
Hello  
Hello  
Hello  
outer  
Hello  
Hello  
Hello  
Hello  
Hello  
outer  
Hello  
Hello  
Hello  
Hello  
Hello  
Hello  
outer  
Good-Bye

D. Hello  
Hello  
Hello  
Hello  
Hello  
Good-Bye

**Correct Answer: C**

## QUESTION 22

Given the following code:

outer:

```
for (int i=0; i<5; i++) {  
    for(int j=0; j<5; j++) {  
        System.out.println("Hello");  
        continue outer;  
    }  
    System.out.println("outer");  
}  
System.out.println("Good-Bye");
```

What is the output?

- A. Compilation fails
- B. An exception is thrown at runtime
- C. Hello  
Hello  
Hello  
Hello  
Hello  
outer  
Hello  
Hello

```
Hello
Hello
Hello
outer
Hello
Hello
Hello
Hello
Hello
outer
Hello
Hello
Hello
Hello
Hello
Hello
outer
Hello
Hello
Hello
Hello
Hello
outer
Good-Bye
```

D. Hello  
Hello  
Hello  
Hello  
Hello  
Good-Bye

**Correct Answer:** D

#### QUESTION 23

What will be the result of executing the following code?

```
1. boolean a = true;
2. boolean b = false;
3. boolean c = true;
4. if (a == true)
5. if (b == true)
6. if (c == true)      System.out.println("Some things are true in this world");
7. else                System.out.println("Nothing is true in this world!");
8. else if (a && (b = c)) System.out.println("It's too confusing to tell what is true and what is false");
9. else                System.out.println("Hey this won't compile");
```

- A. The code won't compile
- B. "Some things are true in this world" will be printed
- C. "Hey this won't compile" will be printed
- D. None of these

**Correct Answer:** D

#### QUESTION 24

What will be the result of executing the following code?

```
public static void main(String args[])
{
    char digit = 'a';
    for (int i = 0; i < 10; i++)
    {
        switch (digit)
        {
            case 'x' :
            {
```

```

        int j = 0;
        System.out.println(j);
    }
    default :
    {
        int j = 100;
        System.out.println(j);
    }
}
int i = j;
System.out.println(i);
}

```

- A. 100 will be printed 11 times
- B. 100 will be printed 10 times and then there will be a runtime exception
- C. The code will not compile because the variable i cannot be declared twice within the main() method
- D. The code will not compile because the variable j cannot be declared twice within the switch statement.
- E. None of these

**Correct Answer:** E

#### QUESTION 25

What will happen when you attempt to compile and run the following code?

```

int Output = 10;
boolean b1 = false;

if((b1 == true) && ((Output += 10) == 20))
{
    System.out.println("We are equal " + Output);
}
else
{
    System.out.println("Not equal! " + Output);
}

```

- A. Compilation error, attempting to perform binary comparison on logical data type
- B. Compilation and output of "We are equal 10".
- C. Compilation and output of "Not equal! 20".
- D. Compilation and output of "Not equal! 10".

**Correct Answer:** D

#### QUESTION 26

Given:

```

3. public class Spock {
4.     public static void main(String[] args) {
5.         int mask = 0;
6.         int count = 0;
7.         if( ((5 < 7) || ( ++count < 10)) | mask < 10 )           mask = mask + 1;
8.         if( (6 > 8) ^ false)                                    mask = mask + 10;
9.         if( !(mask > 1) && ++count > 1)                          mask = mask + 100;
10.        System.out.println(mask + " " + count);
11.    }
12.}

```

Which two are true about the value of mask and the value of count at line 10?

- A. mask is 0
- B. mask is 1

- C. mask is 2
- D. mask is 10
- E. mask is greater than 10
- F. count is 0
- G. count is greater than 0

**Correct Answer:** CF

#### QUESTION 27

Given:

```
int x = 0;
int y = 10;
do {
    y--;
    ++x;
} while (x < 5);
System.out.print(x + "," + y);
```

What is the result?

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

**Correct Answer:** B

#### QUESTION 28

Given:

```
11. public class Test {
12.     public static void main(String [] args) {
13.         int x = 5;
14.         boolean b1 = true;
15.         boolean b2 = false;
16.
17.         if ((x == 4) && !b2 )
18.             System.out.print("1 ");
19.         System.out.print("2 ");
20.         if ((b2 = true) && b1 )
21.             System.out.print("3 ");
22.     }
23. }
```

What is the result?

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

**Correct Answer:** D

#### QUESTION 29

Given:

```
public void go() {
```

```

String o = "";
z:
for(int x = 0; x < 3; x++) {
    for(int y = 0; y < 2; y++) {
        if(x==1) break;
        if(x==2 && y==1) break z;
        o = o + x + y;
    }
}
System.out.println(o);
}

```

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.

**Correct Answer: C**

### QUESTION 30

Given:

```

String[] elements = { "for", "tea", "too" };
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].

**Correct Answer: D**

### QUESTION 31

Given:

```

public static void test(String str) {
    int check = 4;
    if (check = str.length()) {
        System.out.print(str.charAt(check -= 1) + ", ");
    } else {
        System.out.print(str.charAt(0) + ", ");
    }
}

```

and the invocation:

```

test("four");
test("tee");
test("to");

```

What is the result?

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

**Correct Answer: C**

**QUESTION 32**

Given:

```
public static void main(String[] args) {  
    String str = "null";  
    if (str == null) {  
        System.out.println("null");  
    } else (str.length() == 0) {  
        System.out.println("zero");  
  
    } else {  
        System.out.println("some");  
    }  
}
```

What is the result?

- A. null
- B. zero
- C. some
- D. Compilation fails.
- E. An exception is thrown at runtime.

**Correct Answer: D**