Java Basics

All Questions Must be Answered

```
1. Question
public class Tester {
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");
}
}
  0 2
  o 3
  0 12
  0 123
  0 23
```

- Compilation Fails
- o An exception is thrown at runtime

Which of these values can a boolean variable contain?

- 1. true
- 2. false
- 3.0
- 4. 1
 - o Only 2
 - o Only 1
 - o 1 and 4
 - o 1 and 2

```
public class Tester {
public static void main(String[] args) {
float f = 12;
switch (f) { // Line 1
case 10 + 1: // Line 2
System.out.println("Twelve");
```

```
case 0: // Line 3
System.out.println("Zero");
case (int) 12.0:
System.out.println("Decimal");
default:
System.out.println("Default");
}
}
```

- o Compiles successfully without any error
- o Compilation error in Line 3 "Cannot use 0 case"
- o Compilation error in Line 2 "Cannot use operator in case"
- Compilation error in Line 1 " Cannot use float type in switch"

4. Question public class Tester {

```
public class lester {
public static void main(String[] args) {
int i = 1;
int j = 0;
switch (i) {
case 1:
```

```
j = j + 2;
case 2:
++j;
break;
case 3:
j++;
default:
j = 5;
break;
}
System.out.println(j);
}
}
  0 3
  0 5
  0 4
  o 2
```

5. If switch feature is used, then

- o default case must be present
- $\circ\;$ default case, if used , should be the last case

- o default case, if used, can be placed anywhere
- o none of the above

```
6. Question
```

```
What will be the output of the below code?

public static void main(String args[]) {

int age;

System.out.println(age);

}
```

- 0
- o Garbage Value
- o Compilation Error
- o 2147483647

```
public class Tester {
public static void main(String[] args) {
int i = -1, j = -1;
switch (i) {
case -1:
```

```
j = 1;
case 2:
j = 2;
break;
default:
j = 0;
}
System.out.println("j = " + j);
}
}
   o j=2
   o j=1
   o j=0
   o Compilation Error
8. Question
public class Tester {
public static void main(String[] args) {
double i;
char j = 'b';
switch (j) {
Core Java Class-53
```

```
case 'a':
case 'A':
i = 7.5;
break;
case 'b':
case 'B':
i = 5.5;
break;
case 'c':
case 'C':
i = 2.5;
break;
default:
i = 0.5;
}
System.out.println(i);
}
```

 Compilation error as each block must have at least one statement

- Compilation error as variable i is not initialized while declaration
- 0.5
- 0 5.5

```
What is the result of compiling and running the following code? public static void main(String[] args) { int x = 5, y; while (++x < 7) { y = 2; } System.out.println(x + y);
```

0 7

}

- 0 8
- 0 9
- o Compilation Error

10. Question

public class Tester {

```
public static void main(String[] args) {
int k = 2;
switch (k) {
case 'a':
System.out.println("Welcome");
case 2:
System.out.println("To");
case 'b':
System.out.println("Infosys");
break;
default:
System.out.println("Hello");
}
}
}
  o Welcome To Infosys Hello
  o To Infosys
  o To
  o Hello
```

```
public class Tester {
public static void main(String[] args) {
boolean x = true;
boolean y = false;
if (x && y) {
System.out.println(true);
} else {
System.out.println(false);
}
}
```

- o true
- o false
- o true false
- o Compilation Error

12. Which of the following options correctly relates / and %

$$ob = (a/b) * b + a%b$$

$$ob = (a\%b) * b + a/b$$

```
\circ a = (a%b) * b + a/b
```

```
What should be the value of num1 and num2 to get the output as 2?
public class Demo {
public static void main(String[] args) {
int num1;
int num2;
if ((num1 / num2 == 5) \&\& (num1 + num2) > 5) {
System.out.println("1");
else if ((num1 - num2) >= 1 || (num1 % num2) == 0) {|}
System.out.println("2");
} else {
System.out.println("3");
}
}
}
  o num1 = -10, num2 = 3
  o num1 = 5, num2 = 1
  \circ num1 = 0, num2 = 5
  o num1 = 11, num2 = 2
```

14. Question Find the output of the following program. public class Solution{ public static void main(String[] args){ byte x = 127; χ++; χ++; System.out.print(x); } } o -127 0 127 0 129 0 2 15. Question public class Tester { public static void main(String[] args) { int num1 = 25;

int num2 = 34;

if (num1/3 >= num2/4) {

```
num1 = num1 + 1;
} else {
num2 = num2 + 1;
}
System.out.println(num1 + "," + num2);
}
}
  0 25,35
  0 25,34
  0 26,34
  0 26,36
16. Question
public class Tester {
static {
int x = 3;
}
static int x;
public static void main(String[] args) {
x--; // line 7
System.out.println(x);
}
Core Java Class-53
```

```
}
   0 3
   0 2
   0 -1
   \circ Compilation error at line 7, x is not initialized
17. Question
public class Tester {
public static void main(String[] args) {
int i = 10;
if(i) {
System.out.println("Hello");
}
else {
System.out.println("Bye");
}
}
}
   o Hello
```

o Bye

- o Compilation Error
- o Runtime Error

```
18. Question
public class Tester {
public static void main(String[] args) {
int a = 12 * 3 - 9 / 2;
int b = 14 * 4 + 175 / 8;
if (a++ \% 2 == 0) {
if (b-- % 4 == 0) {
System.out.println("a = " + a + " b = " + b);
} else {
System.out.println("a = " + a + " b = " + b);
}
} else {
System.out.println("a = " + a + " b = " + --b);
}
}
}
   o a=32 b=76
  o a=33 b=76
   o a=33 b=77
```

```
o a=32 b=77
19. Question
Find the output of the following code.
int Integer = 24;
char String = 'l';
System.out.print(Integer);
System.out.print(String);

    Compilation Error

  Throws Exception
  \circ I
  0 241
20. Question
Which of the following codes will compile and run properly?
a. public class Test1 {
public static void main() {
System.out.println("Test1");
}
```

Core Java Class-53 Test

b. public class Test2 {

```
static public void main(String[] in) {
System.out.println("Test2");
}
}
c. public class Test3 {
public static void main(String args) {
System.out.println("Test3");
}
d. public class Test4 {
staticint main(String args[]) {
System.out.println("Test4");
}
e. public class Test5 {
static void main(String[] data) {
System.out.println("Test5");
}
  o a only
  o b only
```

```
o a and b only
```

o All are

```
21. Question
class ExampleFive {
public static void main(String[] args) {
final int i = 22;
byte b = i;
System.out.println(i + ", " + b);
}
}
  o Prints: 22, 20
  o Runtime Error: Cannot type cast int to byte
  o Prints: 22, 22
  o Compile Time Error: Loss of precision
22. Question
public class Tester {
public static void main(String[] args) {
int a = 10;
int b = 2;
```

```
System.out.println((a < b)? a++:--b);
}
}
  0 2
  0 1
  0 10
  0 11
23. Question
public class Tester {
public static void main(String[] args) {
int num1 = 100;
int num2 = 200;
int num3 = 6;
if (5 \ge num3) {
if (num1 > 100 || num2 > 150) {
System.out.println("1");
}
} else if (num1 >= 100 && num2 > 150) {
System.out.println("2");
} else {
System.out.println("3");
```

```
}
}

}

0 1
0 2
```

0 13

o **3**

24. The purpose of the following program

```
b = s + b;
s = b - s;
```

b = b - s;

where s, b are two integers is to

- o exchange (swap) the contents of s and b
- o transfer contents of s to b
- o transfer contents of b to s
- o negate the contents of s and b

```
public class Tester {
public static void main(String[] args) {
```

```
int k = 1;
switch (k) {
default:
System.out.println("Have");
case 'a':
System.out.println("A");
case 'b':
System.out.println("Good Day");
}
}
}
  o Hava A
  o Compilation Error
  o Have
  o Have A Good Day
26. Question
Find the output of the following program.
public class Solution{
public static void main(String[] args){
short x = 10;
x = x * 5;
Core Java Class-53
```

```
System.out.print(x);
}
}
  0 50
  0 10
  o Compilation Error
  o Runtime Error
27. Question
public class Tester {
public static void main(String[] args) {
int num1 = 20;
double num2 = 0;
if (num1 >= 20)
num2 = 1.5;
if (num1 < 30)
num2 = 2;
System.out.println("Value of num2 is " + num2);
}
}
                                                            Page 22 of 25
Core Java Class-53
```

- o Value of num2 is 2.0
- Value of num2 is 2
- Value of num2 is 1.5
- o Runtime Error

. Number of primitive data types in Java are?

- 0 6
- 0 7
- 0 9
- 0 8

29. Question

```
public class Tester {
public static void main(String[] args) {
int a = -10;
int b = -200;
int c = 2000;
int d = 4000;
if (a * b >= d) {
```

if (d > c) {

```
if (d % c != 0) {
System.out.println(11);
} else {
System.out.println(22);
}
}
} else {
if (b/a > 0) {
if (a < b || d % c != 0) {
System.out.println(33);
} else {
System.out.println(44);
}
}
}
}
}
   0 44
   0 11
   o 33
   0 22
```

```
30. Question
public class Tester {
public static void main(String[] args) {
int k = 1;
switch (k) {
default:
System.out.println("Hello");
case 1:
System.out.println("Welcome");
case 2:
System.out.println("To");
case 3:
System.out.println("Infosys");
break;
}
}
}
  o Welcome to Infosys
  o Hello
  o Welcome

    Compilation Error
```