Find output or error (Decision Making and Branching)

Question 01

```
class Test
{
	public static void main(String[] args)
	{
		boolean i;
		if(i=(true,false,true))
			System.out.println("bye");
		else
			System.out.println("hello");
		System.out.println("hi");
	}
}
```

Output:
Syntax error on token “=”, Name expected after this token.

Question 02

```
public class Main
{
	public static void main(String []args)
	{
		boolean i=false,x=false,y=true;
		if(i=(x=i=y))
		System.out.println("bye");
		else
		System.out.println("hello");
		System.out.println("hi");
	}
}
```

Output:
bye

hi

Question 03

```
public class Main
{
	public static void main(String []args)
	{
		boolean i=false;
		if(!i && i==true)
			System.out.println(“bye”);
		else
			System.out.println(“hello”);
		System.out.println(i);
	}
}
```

Output:

hello
false

Question 04

```
public class Main
{
	public static void main(String[] args)
	{
		int n=5;
		if(n<=4)
		System.out.println("n is less than 4");
		System.out.println("checking");
		else
		System.out.println("n is greater than equal to 4");
	}
}
```

Output:

error(s).Main.java:18: error: 'else' without 'if'
else

^
1 error

Question 05

```
public class Main
{
	public static void main(String[] args)
	{
		boolean i=false;
		if(i!=true & !i!=false)
			System.out.println("bye");
		else
			System.out.println("hello");
		System.out.println("hi");

	}
}
```

Output:
bye
Hi

Question 06

```
class Test
{
	public static void main(String[] args)
	{
		if (true)
		{
			System.out.println(“Hello”);
			break;
		}
	}
}
```

Output:-
Error (break; statement is not necessary in this case)

Question 07

```
public class Test
{
	public static void main(String[] args)
	{
		int x=2,y=2;
		int z;
		if (x>2)
		{
			if(y>2)
			{
				z=x+y;
				System.out.println("z="+z);
			}
		}
		else
			System.out.println("x="+x);
	}
}
```

Output:
x = 2

Question 08

```
class Test1
{
	public static void main(String s[])
	{
		float f = 75.0f;
		double d = 75.0;
		int i = 75;
		if( f == d )
		{
			if( f == i )
			{
				System.out.println("f, d and i are equal");
			}
			else
			{
				System.out.println("f, d are equal but i is not equal");
```

```
                }
        }
        else
        {
                System.out.println("f and d are not equal");
        }
    }
}
```

Output:
f, d and i are equal

Question 09

```
public class demo
{
    public static void main(String[] args)
    {
        int x = 10;
        if (++x < 10 && (x / 0 > 10))
        {
            System.out.println("Hello");
         }
        else
        {
            System.out.println("HIIII");
        }
    }
}
```

Output:
HIIII

Question 10

```
public class demo
{
    public static void main(String[] args)
    {
        int k = 65;
```

```
                switch (k)
                {
                        default : System.out.print("Website");
                        case 65 : System.out.print("Merit");
                        case 'k' : System.out.print("Campus");
                        case 'j' : System.out.print("Java"); break;
                }
        }
}
```

Output:
MeritCampusJava

Question 11

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

Output
true

Question 12

```
public class Test
{
```

```
	public static void main(String[] args)
	{
		int x=Integer.MAX_VALUE;
		System.out.println(x>>28);
	}
}
```

Output:
15

Question 13

```
public class Directions
{
	public static void main(String args[])
	{
		if(if( 2 > 1 ))
		{
			System.out.println(" 2 is greater than 1");
		}
	}
}
```

Output:
error: illegal start of expression at if(if(2 > 1))

Question 14

```
public class Directions
{
	public static void main(String args[])
	{
		char direction = 'N';
		char west = 'W';
		switch(direction)
		{
			case 'N': System.out.println("North"); break;
			case 'E': System.out.println("East"); break;
```

```
                    case west: System.out.println("West"); break;
                    case 'S': System.out.println("South");
                }
        }
}
```

Output:
error: error: constant expression required
case west: System.out.println("West"); break;

Question 15

```
public class demo
{
        public static void main(String[]args)
        {
                int a = 7;
                if ( a*2==a<<33 )
                {
                        System.out.print( "Yup" );
                }
                else
                {
                        System.out.print( "Nope!" );
                 }
        }
}
```

Output:
Yup

Question 16

```
public class Test
{
        public static void main(String[] args)
        {
                boolean b = true;
```

```
                if (b = false)
                {
                        System.out.println("HELLO");
                }
                else
                {
                        System.out.println("BYE");
                }
        }
}
```

Output:
BYE

Question 17

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

Output:
false

Question 18

```
public class Test
```

```
{
	public static void main(String[] args)
	{
		int a = 10;
		int b = 9;
		if (a > b)
		System.out.println("a is greater");
		System.out.println("I am not in if block");
	}
}
```

Output:
a is greater
I am not in if block

Question 19

```
public class Main
{
	public static void main(String[] args)
	{
		float fl = 5.3f;
		if (fl == 5.3)
		System.out.println("Both are equal");
		else
		System.out.println("Both are not equal");
	}
}
```

Output:
Both are not equal

Question 20

```
public class Test
{
	public static void main(String[] args)
	{
	     int f = 10, s=0;
	     if (f < 10)
```

```
                s = 1;
            if (f >= 10)
                s=2;
        System.out.println("y is " + s);
    }
}
```

Output:
y is 2

Question 21

```
public class Test
{
        public static void main(String[] args)
        {
            if(true && false && true || false)
            System.out.println("True.");
            else
            System.out.println("False");
    }
}
```

Output:
False

Question 22

```
public class temp
{
        public static void main(String args[])
        {
                int x=1;
                if((boolean)x==true)
                        System.out.println("True.");
                else
                        System.out.println("False.");
        }
```

```
}
```

Output:

```
Exception in thread "main" java.lang.
Error: Unresolved compilation problem:
        Cannot cast from int to boolean
```

Question 23

```
public class q23
{
        public static void main(string[ ] args)
        {
                int ok = 10;
                switch (ok)
                {
                        default: System.out.println(“default”); break;
                        case 0: System.out.println(“true”); break;
                        case 1: System.out.println(“false”); break;
                }
        }
}
```

Output:

```
default
```

Question 24

```
public class Test
{
        public static void main(String[] args)
        {
                int var1 = 5;
                int var2 = 6;
                if ((var2 = 1) == var1)
                System.out.print(var2);
                else
                System.out.print(++var2);
        }
}
```

Output:
2

Question 25

```
public class Test
{
	public static void main(String[] args)
	{
	int a = 10, b = 20;
	if (a < b)
	{
		if (a > b)
		{
			System.out.println("HELLO ITER");}
			 else {
			System.out.println("WELCOME");
			}
		}
	}
}
```

Output:
WELCOME

Question 26

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

```
        }
}
```

Output:
true

Question 27

```
public class Student
{
        public static void main(String s[])
        {
                int marks = 80;
                if( marks > 70 )
                        System.out.println("Distinction");
                if( marks > 35 )
                        System.out.println("Pass");
                else
                        System.out.println("Fail");
            System.out.println("Better luck next time");
    }
}
```

Output:
Distinction
Pass
Better luck next time

Question 28

```
public class Test2
{
        public static void main(String s[])
        {
                int a=15;
                int b=25;
                if ((a<b) || (a=5)>15)
                        system.out.println(a);
                else
                        system.out.println(b);
```

```
        }
}
```

Output :
15

Question 29

```
public class Test2
{
        public static void main(String args[])
        {
                int x = 20;
                int y = 25;
                if (++x < (y = y -= 4) || (x = x += 4) > y)
                {
                        System.out.println(x + "," + y);
                }
        }
}
```

Output:
25,21

Question 30

```
public class Test2
{
        public static void main(String args[])
        {
                int i = 0;
                if( i++ + i>=1)
                System.out.println(true);
                else
                System.out.println(false);
        }
}
```

Output:
true

Question 31

```
public class demo4
{
	public static void main(String args[])
	{
		int i = 5;
		if( !i)
			System.out.println(well);
		else
			System.out.println(done);
	}
}
```

Output:
Done

Question 32

```
class demo5
{
	public static void main(String args[])
	{
		int var1 = 5;
		int var2 = 6;
		if ((var2 = 1) == var1)
			System.out.print(var2);
		else
			System.out.print(++var2);
	}
}
```

Output:
2

Question 33

```
public class Demo1
{
	public static void main(String args[])
	{
		int a = 5;
		int b = 10;
		boolean c=false;
		if (a == b >> 1 || c==true)
		{
			System.out.println("ITER");
		}
		else
		{
			System.out.println("SOA");
		}
	}
}
```

Output:
ITER

Question 34

```
public class Demo3
{
	public static void main(String[] args)
	{
		int x=15;
		int y=10;
		int z=5;
		if(x>y & y>z)
		if (x>z | y>x)
		if(x>y ^ z<y)
		System.out.println("Apple");
```

```
                else
                System.out.println("Orange");
                else
                System.out.println("Banana");
                else
                System.out.println("Grapes");
        }
}
```

Output:
Orange

Question 35

```
public class Demo3
{
        public static void main(String[] args)
        {
                int var = 12;
                switch ("var")
                {
                        case "014" : System.out.print("Hello"); break;
                        case "12" : System.out.print("Hi");
                        default : System.out.print("How r u?");
                }
        }
}
```

Output:
How r u?

Question 36

```
public class Demo3
{
        public static void main(String[] args)
        {
                int number = 4;
                double alpha = -1.0;
                if (number > 0)
                if (alpha > 0)
```

```
                System.out.println("Here I am!");
                else if(number< alpha)
                System.out.println("No, I'm here!");
                else
                System.out.println("No, actually, I'm here!");
                System.out.println("Most probably I am there");
        }
}
```

Output:
No, actually, I'm here!
Most probably I am there

Question 37

```
public class Demo5
{
        public static void main(String[] args)
        {
                int x = 1, y = 2;
                switch (x)
                {
                        case 1:
                        switch (y)
                        {
                                case 2:  System.out.println( "Choice is 2"); break;
                                case 3: System.out.println( "Choice is 3"); break;
                         }
                        break;
                        case 4: System.out.println( "Choice is 4"); break;
                        case 5: System.out.println( "Choice is 5"); break;
                        default: System.out.println( "Choice is other than 1, 2 3, 4, or 5");
break;
                }
         }
}
```

OUTPUT:
Choice is 2

Question 39

```
class Demo2
{
	public static void main(String[] args)
	{
		int i=0;
		if (i==1);
			i=2;
		System.out.println(i);
	}
}
```

Output:

2

Question 40

```
class Demo3
{
	public static void main(String[] args)
	{
		int i = 2;
		switch (i)
		{
				case 1: System.out.println(i);
				case 2:  System.out.println(i + 1);
				case 3: System.out.println(i + 2); break;
				default: System.out.println(i + 3);
		}
	 }
}
```

Output:

3
4

Question 41

```
class Demo4
```

```
{
	public static void main(String s[])
	{
		if( 1 < 2 )
		{
		System.out.println("1 is less than 2");
		}
		else
		System.out.println("2 is less than 1");
		System.out.println("Hello");
	 }
}
```

Output:
1 is less than 2
Hello

Question 42

```
class OperatorsOutput
{
	public static void main(String s[])
	{
		int a = 12 + 21 * 3 - 9 / 2;
		int b = 14 - 32 * 4 + 175 / 8 - 3;
		if(++a > 71 && --b < 20)
		{
			System.out.println("a = " + a + " b = " + b);
		}
		if(b-- == -97 || a-- < 100)
		{
			System.out.println("a = " + a + " b = " + b);
		}
	}
}
```

Output:
a = 72 b = -97
a = 72 b = -98

Question 44

```
public class Alpha
{
	public static void main(String[] args)
	{
		int x = 'a';
		switch (x)
		{
			case 5: x += 5;
			case 97: x += 10;
			case 98: x += 15; break;
			case 99: x += 20;
		}
		System.out.println(x);
	}
}
```

Output:
122

Question 45

```
public class Alpha
{
	public static void main(String[] args)
	{
		float a=0.7f;
		if(a<0.7)
		System.out.println("Hello World");
		else
		System.out.println("Hello ITER ");
	 }
}
```

Output
Hello ITER

Question 46

```
public class Alpha
```

```
{
	public static void main(String[] args)
	{
		int a=35;
		int b=25;
		if ((a>b) && (a=5)<15)
		System.out.println(a);
		else
		System.out.println(b);
	}
}
```

Output:
5

Question 47

```
public class Alpha
{
	public static void main(String[] args)
	{
		double x = 6.2;
		if(x-- >= 6.0)
		System.out.print("first ");
		if(--x >= 5.0)
		System.out.print("second ");
		if(x-- >= 4.0)
		System.out.print("third ");
		else
		System.out.print("fourth ");
	}
}
```

Output:
first third

Question 48

```
public class Main
```

```
{
	public static void main(String[] args)
	{
		switch(*(3 + "I LOVE" "ABCD" + 3))
		{
			case 'A': System.out.println("Apple Mac"); break;
			case 'B': System.out.println("Windows"); break;
			case 'C': System.out.println("Great Linux");  break;
			default: System.out.println("All the above");
		}
	}
}
```

Output:

```
main.java:5: error: illegal start of expression
		switch(*(3 +"i love" "ABCD" + 3))
		        ^
    main.java:5: error: ')' expected
		switch(*(3 +"i love" "ABCD" + 3))
		           ^
    main.java:5: error: case, default, or '}' expected
		switch(*(3 +"i love" "ABCD" + 3))
		            ^
    main.java:5: error: case, default, or '}' expected
		switch(*(3 +"i love" "ABCD" + 3))
		                ^
    main.java:5: error: case, default, or '}' expected
		switch(*(3 +"i love" "ABCD" + 3))
		                 ^
    main.java:5: error: case, default, or '}' expected
		switch(*(3 +"i love" "ABCD" + 3))
		                  ^
    main.java:5: error: case, default, or '}' expected
		switch(*(3 +"i love" "ABCD" + 3))
		                   ^
    main.java:6: error: case, default, or '}' expected
		{
		^
    8 errors
```

Question 49

```
public class temp
{
	public static void main(String args[])
	{
		if (!(System.out.println("x")))
		System.out.println("if part");
		else
		System.out.println(" else part");
	}
}
```

Output:
ERROR
(Logical error)

Question 50

```
public class Main
{
	public static void main(String[] args)
	{
		if (int q = 0)
		System.out.println("if part");
		else
		System.out.println("else part");
		return 0;
	}
}
```

Output:
error: incompatible types: unexpected return value

Question 51

```
public class demo
{
	public static void main(String[] args)
	{
		int i = 1;
		switch(i)
		{
			case i:
				printf("case 1 executed");
				break;
			case i + 1:
				printf("case 2 executed");
				break;
			default:
				printf("default block executed");
				break;
		}
	}
}
```

Output:

error: : error: constant expression required, expected at case i+1

Question 52

```
public class A
{
	public final String xyz="if";
	public static void main(String[] args)
	{
		int a=10,b=5;
		xyz(a>>1==b)
		{
			System.out.println("ABC");
		}
	}
}
```

Output:
error: ';' expected at xyz(a>>1==b)

Question 53

```
public class A
{
	public static void main(String[] args)
	{
		int a=10,b=5;
		switch(a<b)
		{
			case true: System.out.println("Wow"); break;
			case false: System.out.println("Its working");break;
		}
	}
}
```

Output:
error: incompatible types: boolean cannot be converted to int	switch(a<b)

Question 54

```
public class A
{
	public static final int x=4;
	public static void main(String[] args)
	{
		int a=10,b=5;
		switch(a<b?a:b-1)
		{
			case 5: System.out.println("Wow");break;
			case 3: System.out.println("Its working"); break;
			case x: System.out.println("Ooh..."); break;
			default: System.out.println("Fine...");
```

```
        }
    }
}
```

Output:
Ooh…

Question 55

```
public class A
{
    public static void main(String[] args)
    {
        int a=10,b=5;
        if(a<b);
        {
            if(b++<=5)
            System.out.println("Abc");
            System.out.println("Def");
        }
    }
}
```

Output:
Abc
Def

Question 56

```
public class A
{
    public static void main(String[] args)
    {
        int a=1024,b=1024;
        boolean c;
        if (c = a>>9==(b/Math.pow(2,9)))
        {
            System.out.println("HELLO");
```

```
                }
                else
                {
                        System.out.println("BYE");
                }
        }
}
```

Output:
HELLO

Question 57

```
class Test
{
        public static void main(String[] args)
        {
                int a=10, b=20, c=30;
                if (c>b>a)
                {
                        System.out.println("TRUE");
                }
                else
                {
                System.out.println("FALSE");
                }
        }
}
```

Output:
error: bad operand types for binary operator '>'

Question 58

```
public class SwitchTest1
{
        public static void main(String[] args)
        {
```

```
            int N = 3;
            switch(N)
            {
                case 1: System.out.println("The number is 1."); break;
                case 2:
                case 4:
                case 8: System.out.println("The number is 2, 4, or 8.");
                        System.out.println("(That's a power of 2!)"); break;
                case 3:
                case 6:
                case 9: System.out.println("The number is 3, 6, or 9.");
                        System.out.println("(That's a multiple of 3!)"); break;
                case 5: System.out.println("The number is 5."); break;
                default: System.out.println("The number is 7 or is outside the
            range1 to 9.");
            }
        }
}
```

Output:

The number is 3, 6, or 9.
(That's a multiple of 3!)

Question 59

```
public class SwitchTest2
{
        public static void main(String[] args)
        {
            String branch = "ECE";
            int semester = 1;
            switch(semester)
            {
                case 1: System.out.println("ICP-CSE 1001");
                switch(branch)
                {
                        case "ECE": System.out.println("ECE is learning ICP");
                        case "CSE":
                        case "EE":  System.out.println("EE is learning ICP");
```

```
                        }
                        case 2:
                        case 3:
                        case 1:
                        default: System.out.println(“Default”);
                }
        }
}
```

Output:

```
 error: duplicate case label
case 1:
```

Question 60

```
public class SwitchTest3
{
        public static void main(String args[])
        {
                int number1 = 111, number2 = 101;
                switch (number1 & number2)
                {
                        case 1 : System.out.println("-1-");
                        case 101 : System.out.println("-101-");
                        case 111 : System.out.println("-111-");
                        case 010 : System.out.println("-010-");
                        default : System.out.println("-" + x & y + "-");
                }
        }
}
```

Output:

```
error: defined variables x, and y
```