

Operations_Conditional_Op_Switch

The screenshot shows a presentation slide with the following content:

Addition,

=>

- > operators in java
- > Arithmetic operators (+, -, *, /, %)
- > Inore & Decr (++, --)
- > logical operators - &&, ||, !
- > Assignment =>
- > conditionals
 - ↓ Ternary operator
- > Break & Switch
- > relational operat →

A green horizontal line is drawn below the assignment operator section.

		T	T
F		T	F
F	T	F	T
F	F	F	F
		T	T

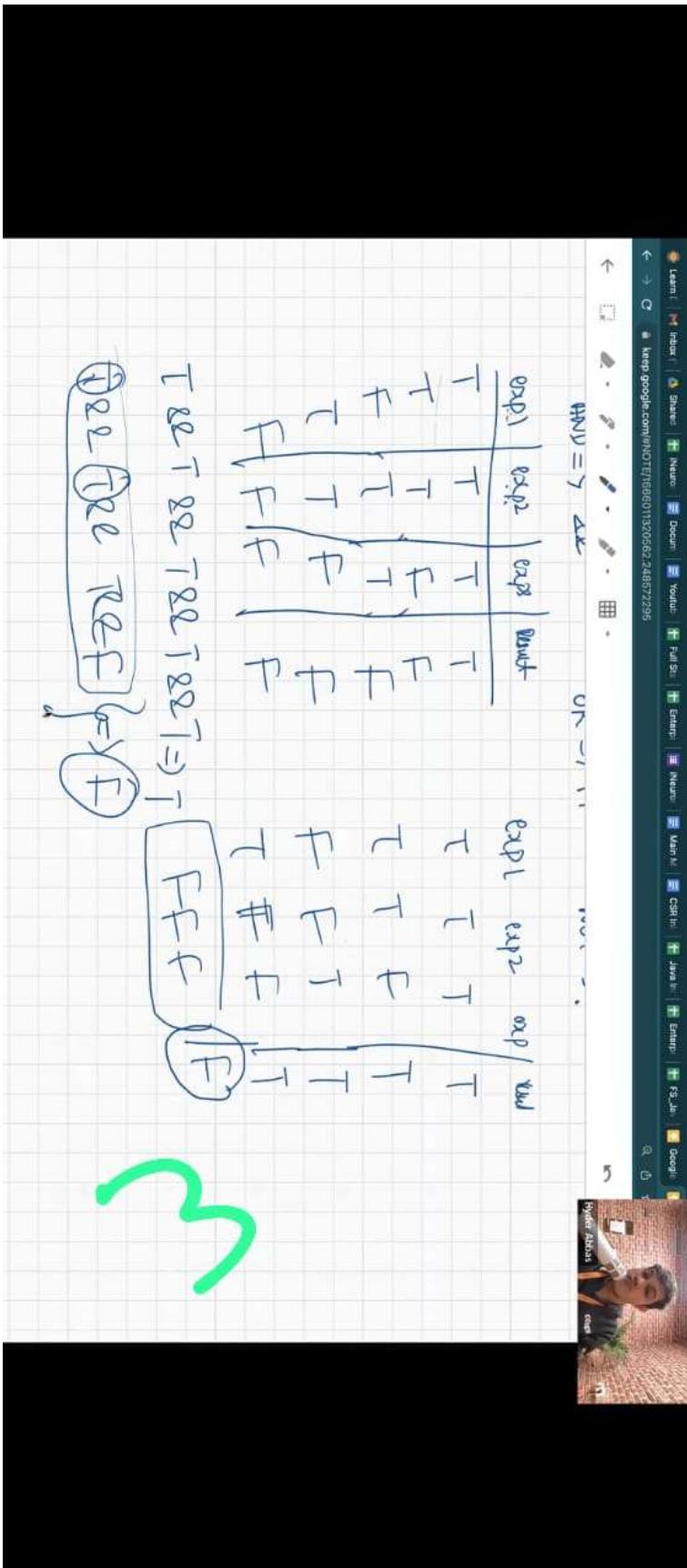
$\Rightarrow \text{logical } \& \text{, } \& \text{, } \| \text{, } \| \text{ }$

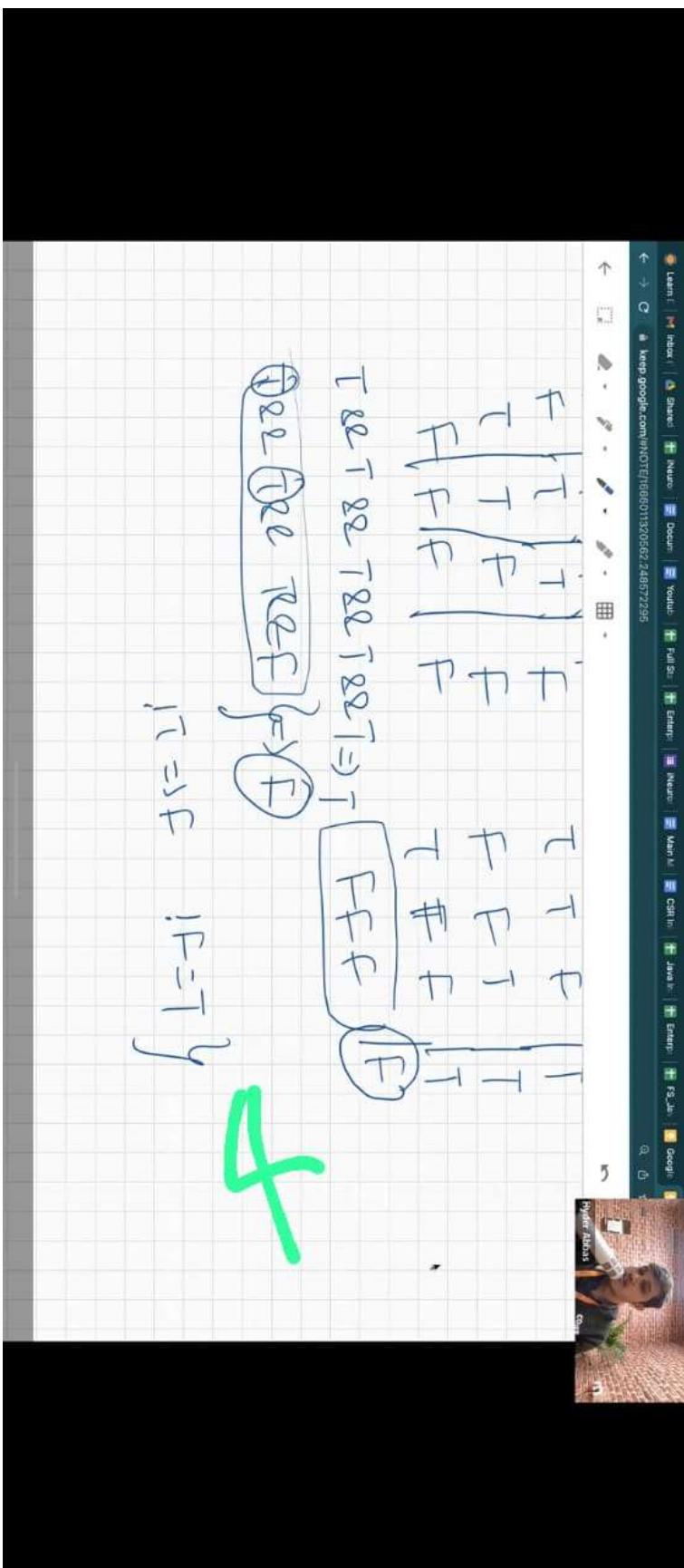
AND $\Rightarrow \&$ OR $\Rightarrow \|$

NOT $\Rightarrow !$

2







$$\left\{ \begin{array}{l} F = T \\ F = -T \end{array} \right.$$

$\&\&$ \Rightarrow If all true $\Rightarrow T$
 \hookrightarrow If all false $\Rightarrow F$

If all true $\Rightarrow \top$
 \rightarrow If all false $\Rightarrow \perp$

$$T \subseteq J \subseteq \omega$$

三

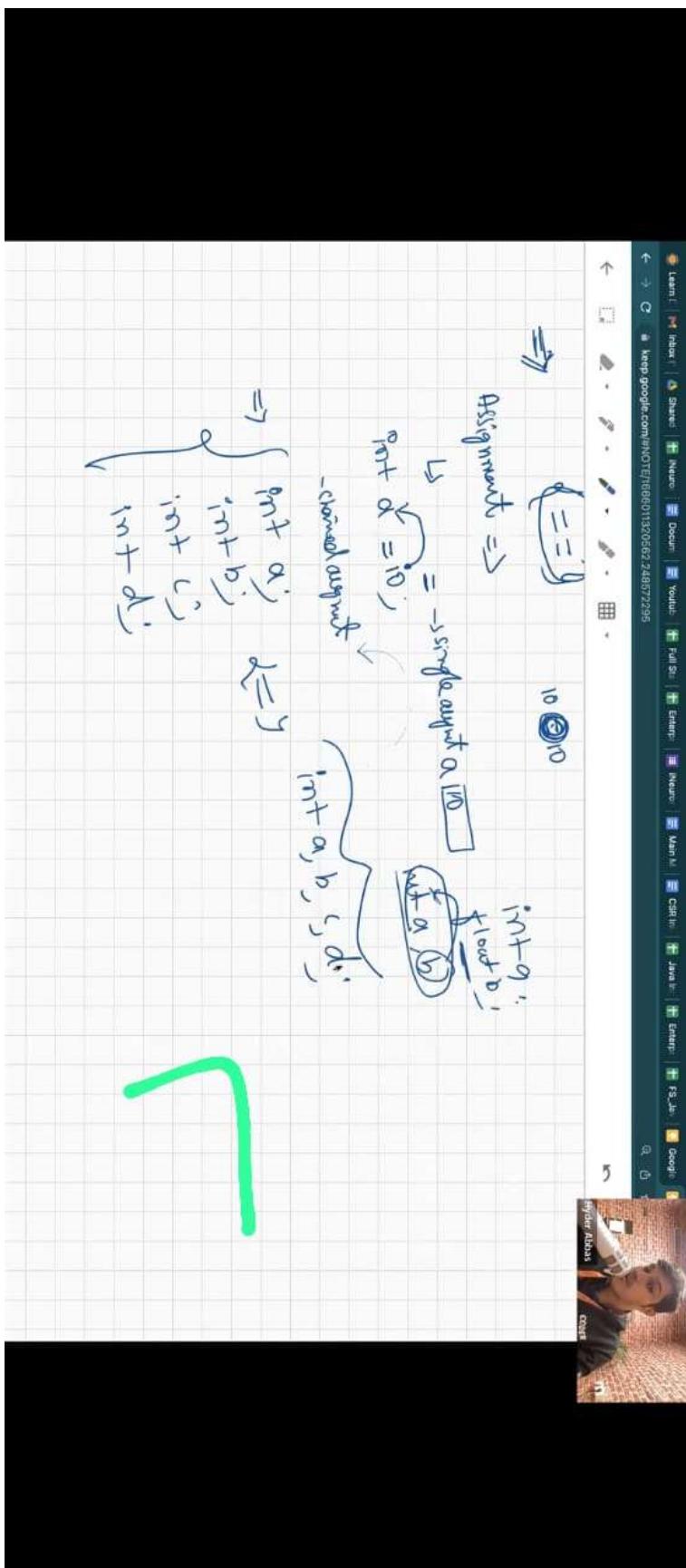
15

If all $T \Rightarrow T$
 If $T \wedge F \Rightarrow T$
 If $T \vee F \Rightarrow T$
 If all $F \Rightarrow T$



\Rightarrow Relational operators \Rightarrow comparison operator
 $>$ $<$ \geq \leq \neq \equiv
 \Rightarrow $\text{int } a = 10;$ $\quad \quad \quad$ $(a > b) \Rightarrow F$
 $\quad \quad \quad$ $\text{int } b = 20;$ $\quad \quad \quad$ $(a \neq b) \Rightarrow T$
 \Rightarrow $(a == b); \Rightarrow \text{False}$
 $\quad \quad \quad$ $(a > b) \Rightarrow F$
 \Rightarrow $(a > b) \Rightarrow T$

6



```
1 package Explorer X;
2
3 import java.awt.*;
4 import javax.swing.*;
5
6 public class LaunchFrame extends JFrame {
7     JButton button1 = new JButton("Launch");
8     JButton button2 = new JButton("Launch");
9     JButton button3 = new JButton("Launch");
10    JButton button4 = new JButton("Launch");
11    JButton button5 = new JButton("Launch");
12    JButton button6 = new JButton("Launch");
13    JButton button7 = new JButton("Launch");
14    JButton button8 = new JButton("Launch");
15    JButton button9 = new JButton("Launch");
16    JButton button10 = new JButton("Launch");
17    JButton button11 = new JButton("Launch");
18    JButton button12 = new JButton("Launch");
19    JButton button13 = new JButton("Launch");
20    JButton button14 = new JButton("Launch");
21    JButton button15 = new JButton("Launch");
22    JButton button16 = new JButton("Launch");
23    JButton button17 = new JButton("Launch");
24    JButton button18 = new JButton("Launch");
25    JButton button19 = new JButton("Launch");
26    JButton button20 = new JButton("Launch");
27    JButton button21 = new JButton("Launch");
28    JButton button22 = new JButton("Launch");
29    JButton button23 = new JButton("Launch");
30    JButton button24 = new JButton("Launch");
31    JButton button25 = new JButton("Launch");
32    JButton button26 = new JButton("Launch");
33    JButton button27 = new JButton("Launch");
34    JButton button28 = new JButton("Launch");
35    JButton button29 = new JButton("Launch");
36    JButton button30 = new JButton("Launch");
37    JButton button31 = new JButton("Launch");
38    JButton button32 = new JButton("Launch");
39    JButton button33 = new JButton("Launch");
40    JButton button34 = new JButton("Launch");
41    JButton button35 = new JButton("Launch");
42    JButton button36 = new JButton("Launch");
43
44    public LaunchFrame() {
45        setLayout(new GridLayout(6, 5));
46
47        add(button1);
48        add(button2);
49        add(button3);
50        add(button4);
51        add(button5);
52
53        add(button6);
54        add(button7);
55        add(button8);
56        add(button9);
57        add(button10);
58
59        add(button11);
60        add(button12);
61        add(button13);
62        add(button14);
63        add(button15);
64
65        add(button16);
66        add(button17);
67        add(button18);
68        add(button19);
69        add(button20);
70
71        add(button21);
72        add(button22);
73        add(button23);
74        add(button24);
75        add(button25);
76
77        add(button26);
78        add(button27);
79        add(button28);
80        add(button29);
81        add(button30);
82
83        add(button31);
84        add(button32);
85        add(button33);
86        add(button34);
87        add(button35);
88
89        add(button36);
90    }
91
92    public void actionPerformed(ActionEvent e) {
93        if (e.getSource() == button1) {
94            System.out.println("Button 1 Clicked");
95        }
96        if (e.getSource() == button2) {
97            System.out.println("Button 2 Clicked");
98        }
99        if (e.getSource() == button3) {
100            System.out.println("Button 3 Clicked");
101        }
102        if (e.getSource() == button4) {
103            System.out.println("Button 4 Clicked");
104        }
105        if (e.getSource() == button5) {
106            System.out.println("Button 5 Clicked");
107        }
108        if (e.getSource() == button6) {
109            System.out.println("Button 6 Clicked");
110        }
111        if (e.getSource() == button7) {
112            System.out.println("Button 7 Clicked");
113        }
114        if (e.getSource() == button8) {
115            System.out.println("Button 8 Clicked");
116        }
117        if (e.getSource() == button9) {
118            System.out.println("Button 9 Clicked");
119        }
120        if (e.getSource() == button10) {
121            System.out.println("Button 10 Clicked");
122        }
123        if (e.getSource() == button11) {
124            System.out.println("Button 11 Clicked");
125        }
126        if (e.getSource() == button12) {
127            System.out.println("Button 12 Clicked");
128        }
129        if (e.getSource() == button13) {
130            System.out.println("Button 13 Clicked");
131        }
132        if (e.getSource() == button14) {
133            System.out.println("Button 14 Clicked");
134        }
135        if (e.getSource() == button15) {
136            System.out.println("Button 15 Clicked");
137        }
138        if (e.getSource() == button16) {
139            System.out.println("Button 16 Clicked");
140        }
141        if (e.getSource() == button17) {
142            System.out.println("Button 17 Clicked");
143        }
144        if (e.getSource() == button18) {
145            System.out.println("Button 18 Clicked");
146        }
147        if (e.getSource() == button19) {
148            System.out.println("Button 19 Clicked");
149        }
150        if (e.getSource() == button20) {
151            System.out.println("Button 20 Clicked");
152        }
153        if (e.getSource() == button21) {
154            System.out.println("Button 21 Clicked");
155        }
156        if (e.getSource() == button22) {
157            System.out.println("Button 22 Clicked");
158        }
159        if (e.getSource() == button23) {
160            System.out.println("Button 23 Clicked");
161        }
162        if (e.getSource() == button24) {
163            System.out.println("Button 24 Clicked");
164        }
165        if (e.getSource() == button25) {
166            System.out.println("Button 25 Clicked");
167        }
168        if (e.getSource() == button26) {
169            System.out.println("Button 26 Clicked");
170        }
171        if (e.getSource() == button27) {
172            System.out.println("Button 27 Clicked");
173        }
174        if (e.getSource() == button28) {
175            System.out.println("Button 28 Clicked");
176        }
177        if (e.getSource() == button29) {
178            System.out.println("Button 29 Clicked");
179        }
180        if (e.getSource() == button30) {
181            System.out.println("Button 30 Clicked");
182        }
183        if (e.getSource() == button31) {
184            System.out.println("Button 31 Clicked");
185        }
186        if (e.getSource() == button32) {
187            System.out.println("Button 32 Clicked");
188        }
189        if (e.getSource() == button33) {
190            System.out.println("Button 33 Clicked");
191        }
192        if (e.getSource() == button34) {
193            System.out.println("Button 34 Clicked");
194        }
195        if (e.getSource() == button35) {
196            System.out.println("Button 35 Clicked");
197        }
198        if (e.getSource() == button36) {
199            System.out.println("Button 36 Clicked");
200        }
201    }
202}
```



22

;

43

Writables

Smartlines

36 · 31 · 572

1:59 AM



Assignments & in-class discussion

The diagram illustrates a state transition. On the left, there is a single node labeled 'a' with a self-loop arrow. Below it is an equals sign (=). To the right, there is a cluster of three nodes, each labeled 'a'. Above the cluster, there is a curved arrow pointing downwards, indicating a transition from the single node to the cluster.

3

$$\begin{aligned}
 & \text{a) } \\
 & \text{One operand subtract + perform } \Rightarrow \text{ under} \\
 & \text{more over opact} \\
 & \text{= } u = \text{young} \\
 & \text{at } + \rightarrow \text{work} \\
 & \text{on } + \rightarrow \text{one}
 \end{aligned}$$

10

↳ Learn ↳ Intro ↳ Share ↳ Neur ↳ Discuz ↳ YouTube ↳ Full Site ↳ Enter ↳ Neur ↳ Main ↳ CSR ↳ Java ↳ Enter ↳ FS_Jun ↳ Google



Based on condition

if - else

int a = 10;

int b = 5;

if (a > b)

{
int res = a - b;
}

else
(a < b)

int res = a + b;
(a > b)

The screenshot shows a Java code editor with the following code:

```
public class Launch4 {
    public static void main(String[] args) {
        // TODO Auto-generated method stub
        /*
         * int a=10; int b=20;
         * 
         * int c = (a<b)? a: b; System.out.println(c);
         */
        int a=10;
        int b=20;
        int c=30;

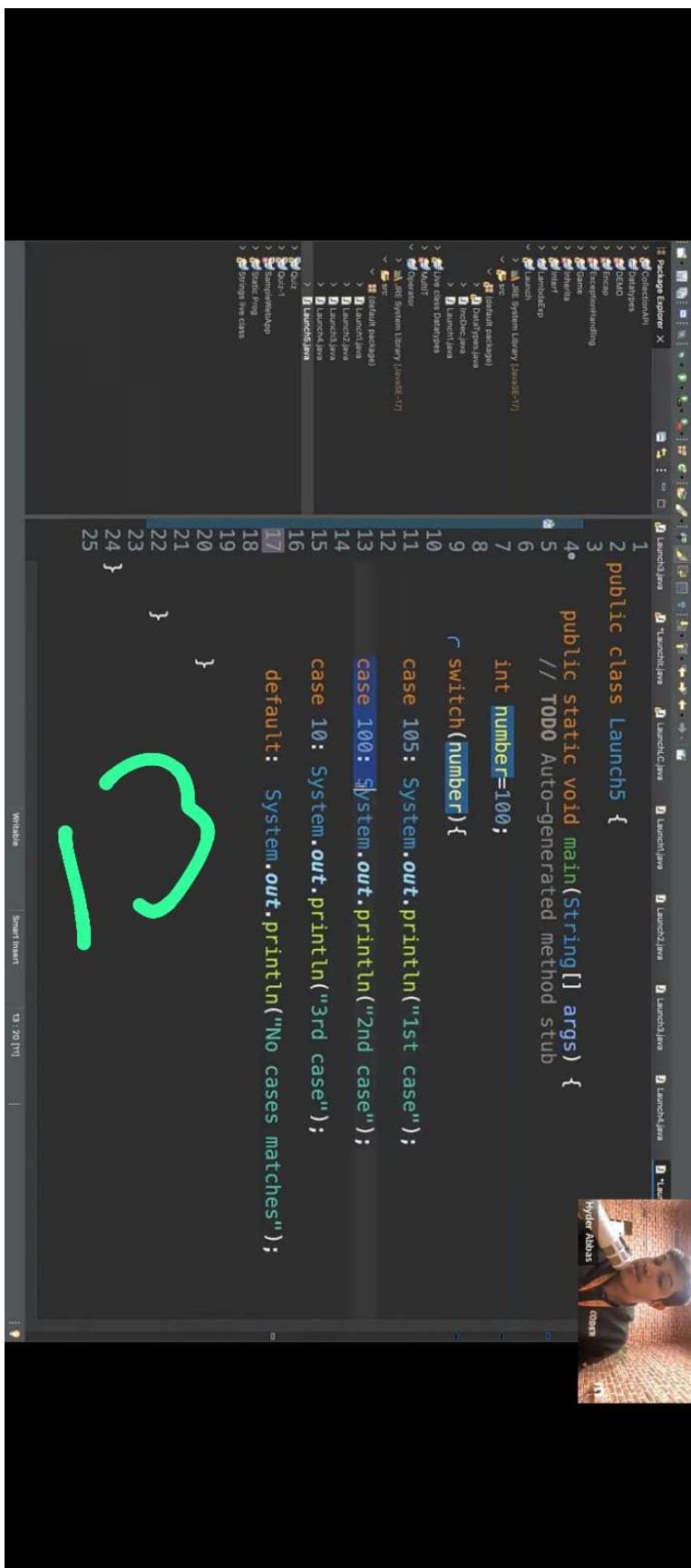
        int res = (a<b)? (a<c? a:c):(b<c?b:c) ;
    }
}
```

A large green hand-drawn mark is drawn over the code editor area, covering the first few lines of the main method and the entire if-else block.

The IDE interface includes a package explorer on the left showing various Java files and a file menu at the top. A video player window in the bottom right corner displays a video titled "Hyder Abbas" with a play button.

12 (? , ,)

12



language fundamentals - Notepad

File Edit View

```
public static void main(String[] args){  
    args[1] = "Day!";  
    System.out.println(args[0] + " " + args[1]);  
}
```

And the commands:

```
javac Test.java  
java Test Good
```

What is the result?

- A. Good
- B. Good Day!
- C. Compilation Error
- D. JVM would create a problem during execution

8.

Consider below code of Test.java file:

```
public class Test {  
    public static void main(String[] args){  
        System.out.println("Welcome " + args[0] + "!");  
    }  
}
```

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Line 8 Col 13

23C Cbury



17-10-2022_snippets-classnotes - Notepad

File Edit View

7.

Given code of Test.java file:

```
public class Test {
    public static void main(String[] args){
        args[1] = "Day!";
        System.out.println(args[0] + " " + args[1]);
    }
}
```

And the commands:

```
javac Test.java
java Test Good
```

What is the result?

A. Good
B. Good Day!
C. Compilation Error
D. JVM would create a problem during execution

answer : D

VS

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File Edit View

7.

Given code of Test.java file:

```
public class Test {
    public static void main(String[] args){
        args[1] = "Day!";
        System.out.println(args[0] + " " + args[1]);
    }
}
```

And the commands:

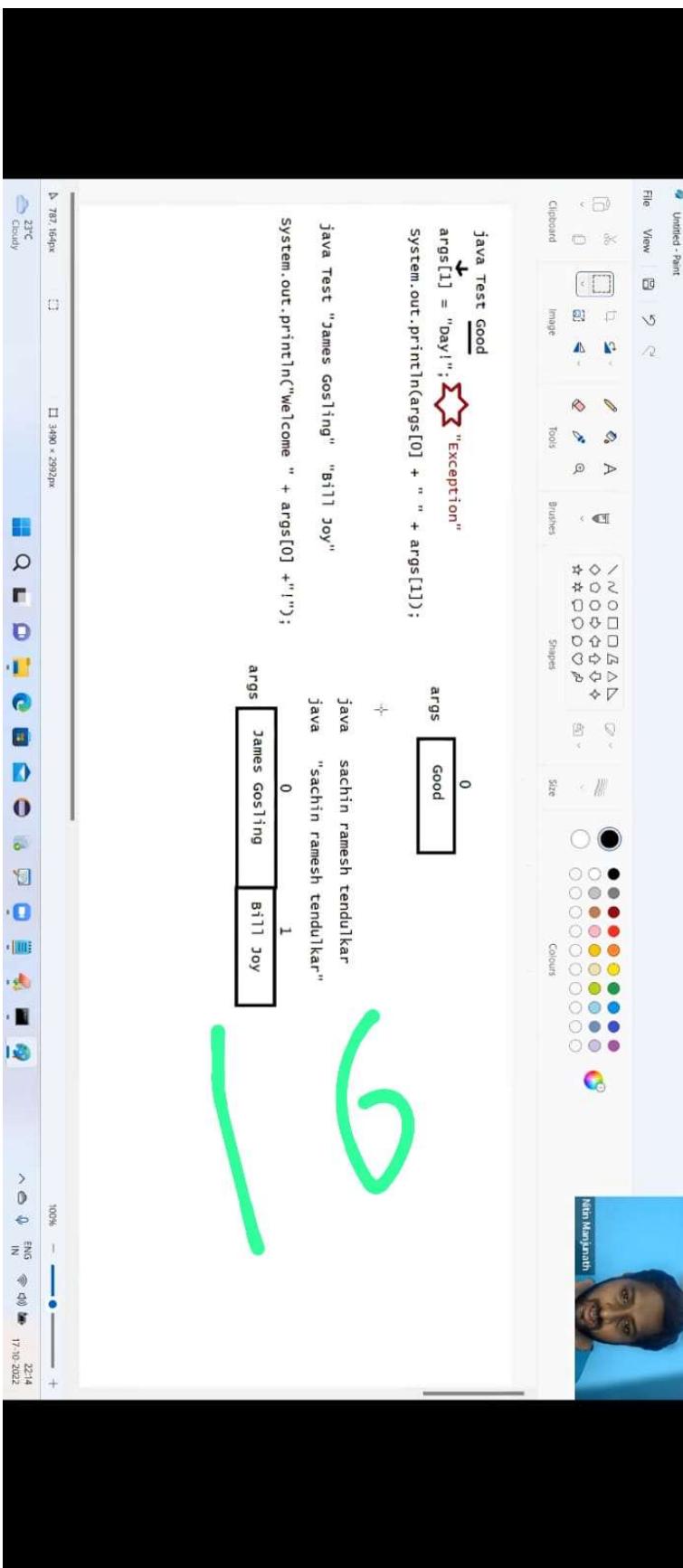
```
javac Test.java
java Test Good
```

What is the result?

A. Good
B. Good Day!
C. Compilation Error
D. JVM would create a problem during execution

answer : D

VS



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File
Edit
View

```
public static void main(String[] args){  
    System.out.println("Welcome " + args[0] + "!");  
}
```

And the commands:

```
javac Test.java
```

```
java Test "James Gosling" "Bill Joy"
```

What is the result?

- A. Welcome James Gosling!
- B. Welcome Bill Joy!
- C. Welcome "James Gosling"!
- D. Welcome "Bill Joy"!
- E. Welcome James!
- F. Welcome Gosling!
- G. Welcome Bill!
- H. Welcome Joy!

answer : A

—



Ln 40 Col 1
100% Windows (C:\EZF) UTF-8
23°C Cloudy
17-10-2022 22:14

10.

Consider below code of Test.java file:

```
public class Test {  
    public static void main(String[] args) {  
        boolean b1 = 0;  
        boolean b2 = 1;  
        System.out.println(b1 + b2);  
    }  
}
```

What is the result of compiling and executing Test class?

- A. 0
- B. 1
- C. true
- D. false
- E. compilation error

answer : E

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File Edit View
H. Welcome Joy!

answer : A



2D
1D

Ln 56 Col 11 100% Windows (C|E) UTF-8
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17-10-2022_snippets-classmate - Notepad

File Edit View

11.

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 : A,D

1

9



Nitin Manjapath

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File Edit View

12.

What will be the result of compiling and executing Test class?

```
public class Test {
    public static void main(String[] args){
        byte b1 = (byte) ( 127 + 21); // byte b1 = (byte)(148)
        System.out.println(b1);
    }
}
```

A. 148
B. Compilation Error
C. -108
D. -128

JVM : minrange + (result-maxrange-1)
= -128 + (148 - 127-1)
= -128 +(148-128)
= -128 +(20)
= -108

Nitin Manjapnaith

17-10-2022_snippets-classnotes - Notepad
File Edit View

13.

Consider below code of Test.java file:

```
public class Test {  
    public static void main(String[] args) {  
        char c1 = 'a'; //ASCII code of 'a' is 97  
        int i1 = c1; //Line n1 // char----> int (implicit typecasting)  
        System.out.println(i1); //Line n2  
    }  
}
```

What is the result of compiling and executing Test class?

- A. a
- B. 97
- C. Line n1 causes compilation failure
- D. Line n2 causes runtime error.

answer : B

Ln 103, Col 1
23C Classify



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17-10-2022_snippets-classnotes - Notepad

File Edit View

14.

Given code of Test.java file:

```
public class Test {  
    public static void main(String[] args) {  
        byte b1 = 10; //Line n1  
        int i1 = b1; //Line n2 Compiler : byte----> int(implicit typecasting)  
        byte b2 = i1; //Line n3 Compiler : int-----> byte (hey not possible u explicitly tell)  
        System.out.println(b1 + i1 + b2);  
    }  
}
```

What is the result of compiling and executing Test class?

- A. Line n1 causes compilation error
- B. Line n2 causes compilation error.
- C. Line n3 causes compilation error.
- D. 30 printed on to console.¹

answer : C

Ln 123 Col 11
23C Classy



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File Edit View

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15.

For the given code what is the output?

```
int x=100;
int a=x++; // a = 100, x = 101
int b= ++x; // b = 102, x = 102
int c= x++; // c = 102, x = 103
int d= (a<b) ? (a<c) ? a : (b<c) ? b : c :x; //int d= (100<102)?(100<102):100
System.out.println(d); //100
```

A. 100
B. 101
C. 102
D. 103
E. compilation fails

answer: A



Nitin Manjapra

17:39, Oct 1 22°C Partly cloudy

Windows (C:\UF) UTF-8

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File Edit View

16.

```
class Test
{
    public static void main(String[] args)
    {
        int a=100; // a= 10-
        System.out.println(-a++); //System.out.println(-100); now a = 101
    }
}
```

A. -101
B. 99
c. Compilation error
d. -100
e. -99

answer : d



- fallthrough in switch
- ```

int a = 97;
switch(a){
 case 97: System.out.println("hello");
 case 98: System.out.println("hiee");
}
output: hello
hiee
```
- A. -101  
B. 99  
c. Compilation error  
d. -100  
e. -99  
answer : d

↑

↑

↑

since there is no break automatically control executed the next case also, this condition in java under switch we call as "fallthrough".

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since there is no break automatically control executed the next case also, this condition in java under switch "fallthrough".

Sir Please You Can Explain For What We Use = a+""+b+""+c+""

```
int a= 10,b=20,c=30;
System.out.println(a + " " + b + " " + c); //10 20 30
```

```
public class Test{
 void main(String args[]){
 //file name will be supplied from the command line arguments
 //code written to open the file and read the contents from the file
 }
}
```

ind.txt  
rahu  
rohit  
|

92

Ln 183 Col 2  
22°C  
Partly cloudy



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```
System.out.println(a + " " + b + " " + c); //10 20 30
```

javac Test.java  
java Test ind.txt  
java Test aus.txt

public class Test{  
 public static void main(String args[]){  
 //file name will be supplied from the command line arguments  
 //code written to open the file and read the contents from the file  
 }  
}

ind.txt  
rahul  
rohit  
kohli

aus.txt

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22°C Partly cloudy





```
17-10-2022 snippet.classmate - Notepad
File Edit View
rahul
rohit
kohli
aus.txt
warner
finch
smith
 ='2'
char ch ="123".charAt(1);
System.out.println(ch++ + ++ch);
('2' + '4')

perform unicode value of '2' and '4'=perform addition
```

In 197 Col 60 100% Windows (CRLF) UTF-8

22°C Partly cloudy ENG 23:00 IN 17-10-2022

```
D:\>javac Test.java
Test.java:7: error: incompatible types: String cannot be converted to char
 char c = "123".valueOf(1);
 ^
1 error

D:\>javap java.lang.String
```

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File Edit View

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nitin : nitin@ineuron.ai

7.

Given code of Test.java file:

```
public class Test {
 public static void main(String[] args){
 args[1] = "Day!";
 System.out.println(args[0] + " " + args[1]);
 }
}
```

And the commands:

```
javac Test.java
java Test Good
```

What is the result?

A. Good  
B. Good Day!

Ln 3 Col 28

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