

Ternary Operator

```
int a;
```

```
int b;
```

```
int perfectSum;
```

Ex3

```
a = 60;
```

```
b = 40;
```

Ex1

```
a = 70
```

```
b = 30
```

$a + b \rightarrow 100$

↓

perfectSum is 110

Ex2

```
a = 20
```

```
b = 30
```

50

$\text{perfectSum} = (\underline{a+b == 100}) ? \underline{110} : \underline{a+b};$
 $\text{S.o.pln}(\text{perfectSum});$

$a = 60$ $b = 40$ <hr/> output - 110	/	$a = 50$ $b = 35$ <hr/> output - 85
--	---	---

int a=5;

1. b = a++

2. c = b++

3. a = ++b

4. b = ++c

5. c = ++a

6. a = b++

7. b = ++c

a	b	c
5	5	-
6	6	5
7	7	5
7	6	6
8	6	8
6	7	8
6	9	9

Conditional Statement

```
if (Condition) {  
    // statement  
}
```

```
int a = 60;
```

```
if(a > 50) { —
```

```
System.out.println("Greater than 50");
```

```
}
```

Output: —

Greater than 50

a = 40 ;

output -

if , else

```
if (condition) {  
    // statement  
} else {  
    // statement  
}
```

```
int a = 6;
```

```
if (a > 50) {
```

```
    System.out.println("Greater than 50");
```

```
} else {
```

```
    System.out.println("Less than 50");
```

```
}
```

Output →
Less than 50

1. $\&\&$

2. $\|\|$

3. $!$

$\&\& \rightarrow (\text{condition 1}) \&\& (\text{condition 2})$

- | | | | |
|----|--------------|--------------|---------------------|
| | \downarrow | \downarrow | |
| 1. | true $\&\&$ | true | \rightarrow true |
| 2. | false $\&\&$ | true | \rightarrow false |
| 3. | false $\&\&$ | false | \rightarrow false |
| 4. | true $\&\&$ | false | \rightarrow false |

|| (or)

(Condition 1) || (Condition 2)

1. true || true → true

2. true || false → true

3. false || true → true

4. false || false → false

(true or false) || true → false || true → true

```
if(condition) {  
    // Statement 1  
}  
else if(condition2) {  
    // Statement 2  
}  
else if(condition3) {  
    // Statement 3  
}  
else {  
    // Statement 4  
}
```