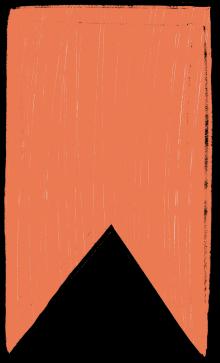


Conditional Statement

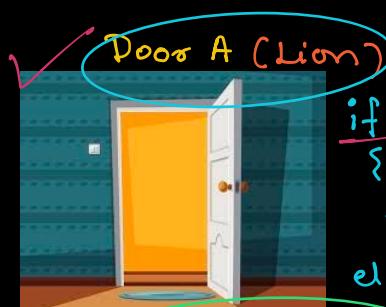
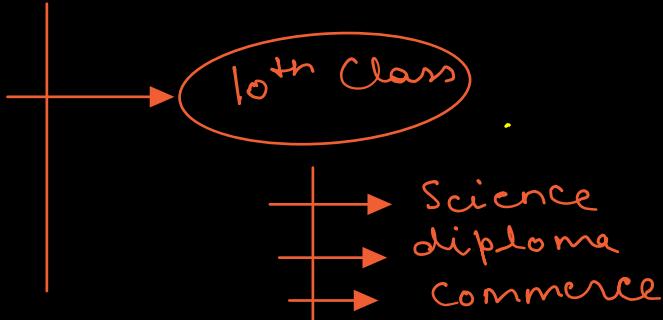
If - Else

If - Else ladder

HackerRank Questions.



Conditional Statement



```
if(personA == swim) personA  
{ print(chooseDoor) }
```

```
else if(person == fireExt.)  
print(chooseDoor)
```

DoorB



```
else { }
```

```
chooseDoor
```

(Fire Extinguisher) → DoorC

(Deal with Animal) → DoorA



```
if ( testCondition ) {  
    true  
    }  
    ==  
    false  
    }  
    } skipped
```

```

int num = 12;
if(num > 0){ 12 > 0 → true
    System.out.println("Positive Number");
}

```

```
System.out.println("Code outside the if Block");
```

Positive Number

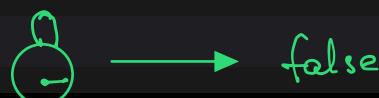
Code outside the if Block

```

public static void main(String[] args) {
    int num = -12;
    if(num > 0){ → false
        System.out.println("Positive Number");
    }
}

```

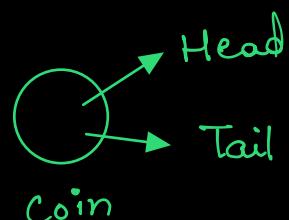
```
System.out.println("Code outside the if Block");
```



if (test Cond) { 2 → Condⁿ

} else {

}

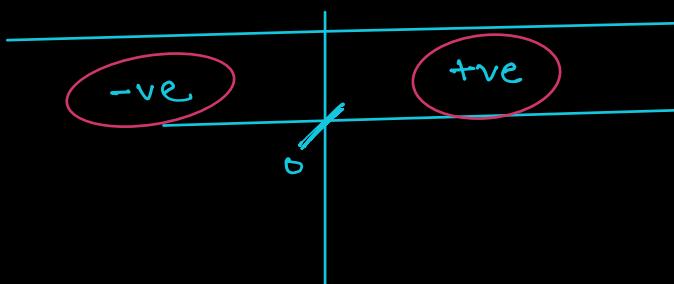


```

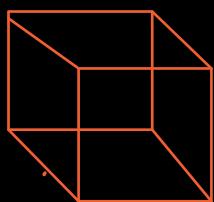
public static void main(String[] args) {
    int num = -12;
    if(num >= 0){ -12 >= 0   No      > 0
        System.out.println("Zero Or Positive Number");
    } else{ [num < 0]      < 0
        System.out.println("Negative Number");
    }
}

System.out.println("Code outside the if Block");

```



if - Else ladder



face = 4

6 faces

```

if ( face == 1){
    print(1);
} else if (face == 2){
    print(2);
} else if (face == 3){
    print(3);
} else if (face == 4){
    print(4);
} else if (face == 5){
    print(5);
} else if (face == 6){
    print(6);
} else{
    print("invalid");
}

```

if (num > 6) } if else num ≤ 6
 (num ≤ 6) }

{ if (num > 6)
 } else if (num ≤ -4) → }

```
public static void main(String[] args) {
    int num = 0;
    if(num > 0){
        System.out.println(" Positive Number");
    }else if(num == 0) {
        System.out.println("Zero");
    }else{
        System.out.println("Negative Number");
    }

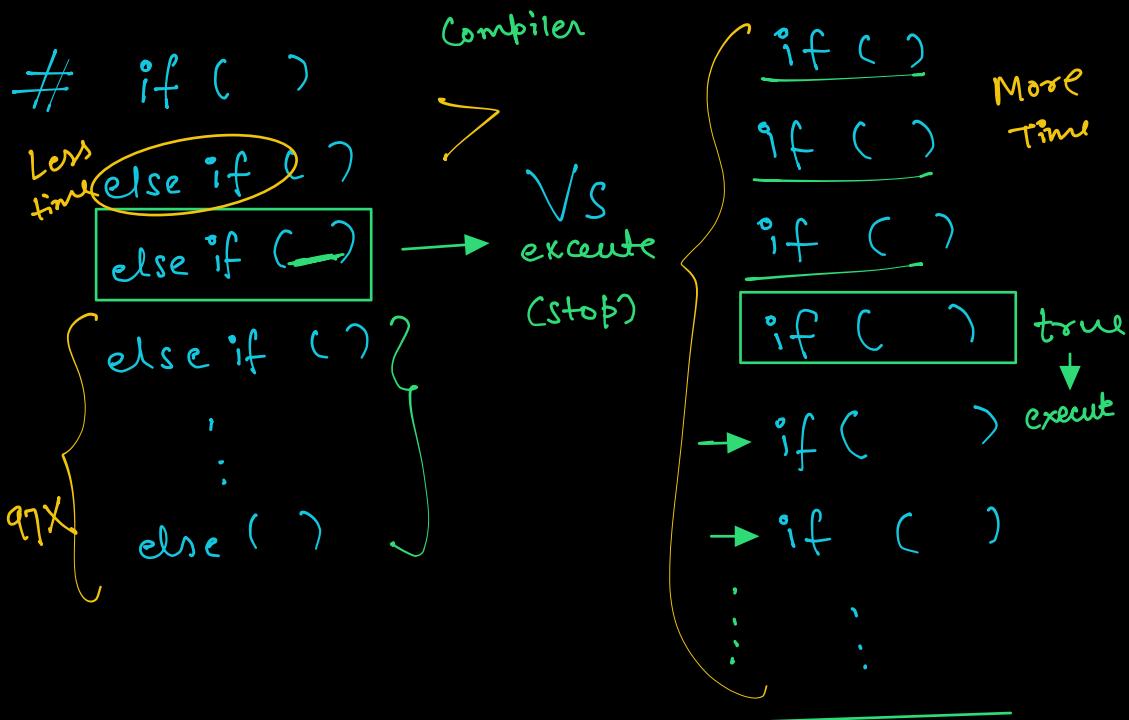
    System.out.println("Code outside the if Block");
}
```

if (num == 1 ✓) { num = 7

}

if (num == 2) ✓ { if ()
 } else if ()
 if (num == 3) ✓ { else if ()
 } (stop) return : 7 ✓
 : 100 times 100 times

: num = 7 → print(); 100 times 100 times



Ternary Operator:

Adult or not 1

Problem

Submissions

Leaderboard

Discussions

You will be given the age of a person as an integer input, you need to print "Adult" if the age is greater than or equal to 18 and print "Below age" if the age is below 18.

$age \geq 18 \rightarrow \text{Adult}$

$\text{else} \rightarrow \text{Below Age}$

```

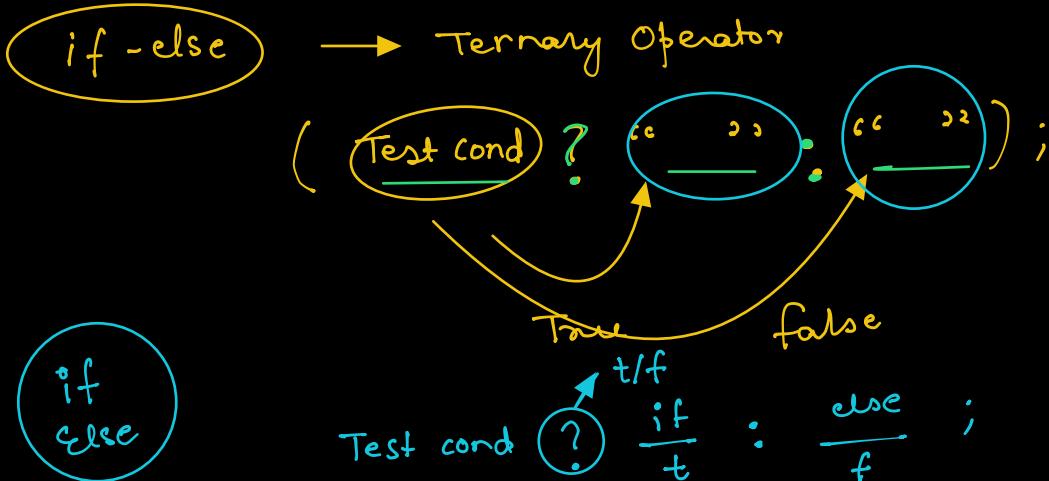
5  public static void main(String[] args) {
6      /* Enter your code here. Read input from STDIN. Print output to STDOUT. Your
7       Scanner scn = new Scanner(System.in);
8       int age = scn.nextInt();
9       if(age >=18){
10           System.out.println("Adult");
11       }else{
12           System.out.println("Below age");
13       }
14   }
15 }
16 }
```

zcode

Ternary Operator
→ if - Else

Language: Java 8

```
1 import java.io.*;
2 import java.util.*;
3
4 public class Solution {
5
6     public static void main(String[] args) {
7         /* Enter your code here. Read input from STDIN. Print output to STDOUT. Your code should consist of a single "return" statement. */
8         Scanner scn = new Scanner(System.in);
9         int age = scn.nextInt();
10        System.out.println(age >= 18 ? "Adult" : "Below age");
```



High Sum or Low Sum

Problem

Submissions

Leaderboard

Discussions

You will get two integer inputs x and y , you need to print "High Sum" if sum is greater than or equal to 100, and print "Low Sum" otherwise.

Input Format
(int) x } y } input

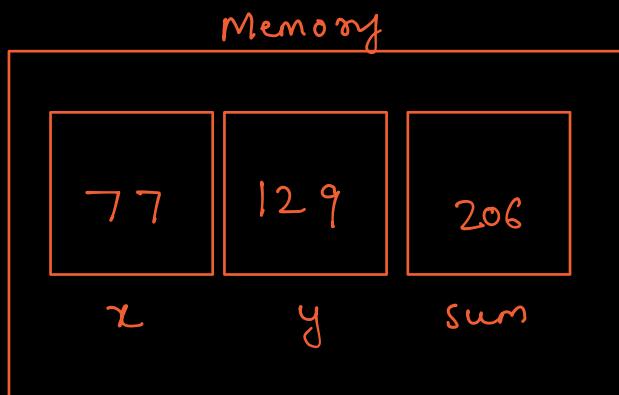
You will get the value of x in the first line, You will get the value of y in the second line.

int sum = $x + y$;
if ($sum \geq 100$)
 print (High Sum);
else
 print (Low Sum);

```

public static void main(String[] args) {
    Scanner scn = new Scanner(System.in);
    int x = scn.nextInt(); 77
    int y = scn.nextInt(); 129
    int sum = x + y; → 206
    if(sum >= 100){ 206 ≥ 100 → True
        System.out.println("High Sum"); ✓
    }else{
        System.out.println("Low Sum");
    }
}

```



Grade the student 1

Problem

Submissions

Leaderboard

Discussions

You are given marks of a student as an integer input. You need to print according to the following rules: 1 for marks above 90, print excellent. 2 for marks above 80 and less than equal to 90, print good. 3 for marks above 70 and less than equal to 80, print fair. 4 for marks above 60 and less than equal to 70, print meets expectations. 5 for marks above 40 and less than equal to 60, print below par. 6 print failed if none of the above conditions follow.

Scanner →

```

int marks = scn.nextInt()      55
if marks > 90 → excellent
else if marks > 80 && marks ≤ 90 → good
else if marks > 70 && marks ≤ 80 → fair

```

```

else if marks > 60 && marks <= 70 → meets expectations
else if marks > 40 && marks <= 60 → below par
else → failed

```

```

Scanner scn = new Scanner(System.in);
int marks = scn.nextInt(); → 54
if(marks > 90){ 54 > 90 → false } skip ↓ Top-Bottom
    System.out.println("excellent");
} else if(marks > 80 && marks <= 90){
    System.out.println("good"); skip
} else if(marks > 70 && marks <= 80){
    System.out.println("fair"); skip
} else if(marks > 60 && marks <= 70){ skip
    System.out.println("meets expectations");
} else if(marks > 40 && marks <= 60){
    System.out.println("below par");
} else{
    System.out.println("failed");
}

```

Memory

54

marks

Shop Discount

Problem

Submissions

Leaderboard

Discussions

A shop will give a discount of 10% on the total cost if the cost of the quantity purchased is more than 1000. a. Ask user for the number of units b. Suppose, one unit will cost 100. c. Judge and print total cost for the user in the integer format.

Input Format

$$\begin{aligned}
 \text{unit} &\rightarrow \text{user} & \text{each unit} &= 100 \\
 15 &\times 100 = 1500 & 1500 &> 1000 \\
 \text{discount} &= 1500 \times \frac{10}{100} = 150 \\
 &= 1500 - 150 \\
 &= 1350
 \end{aligned}$$

$$11 \times 100 = 1100 - 110 = 990$$

$$10 \times 100 = 1000$$

- Scanner
- int unit → scn.nextInt()
- int cost = unit * 100; ✓

```

if (cost > 1000) {
    int discount = (cost * 10) / 100;
    cost = cost - discount
}
print(cost);

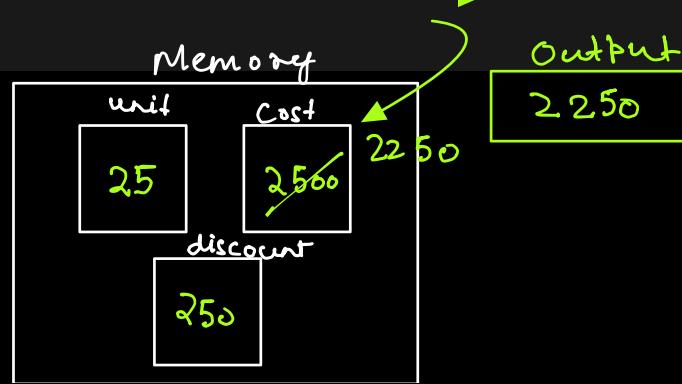
```

~~Cost~~ = ~~cost~~ - ~~discount~~
~~1500~~ - ~~150~~
1350

```

public static void main(String[] args) {
    Scanner scn = new Scanner(System.in);
    int unit = scn.nextInt(); → 25
    int cost = unit * 100; = 2500
    if(cost > 1000){ 2500 > 1000
        int discount = (cost * 10) / 100;
        cost = cost - discount; 2500 - 250
    }
    System.out.println(cost); → 2250
}

```



Print Bonus

Problem

Submissions

Leaderboard

Discussions

$$(\text{salary} * 5) / 100$$

The bonus in a company is given by $\text{Bonus} = \text{Salary} * (5 / 100)$. A company decided to give a bonus of 5% to employees if his/her years of service is more than 5 years. Ask user for their salary and year of service and print the net bonus amount. If the years of service is less than or equal to 5, print 0, otherwise print Bonus calculated.

Scanner

```
int salary = .  
int exp =  
if (exp > 5){  
    int bonus = (sal * 5) / 100  
    print(bonus)  
}  
else  
    print(0)
```

```
, _____ your code here to read input from
```

```
Scanner scn = new Scanner(System.in);  
int sal = scn.nextInt(); 50000  
int exp = scn.nextInt(); 7  
  
if(exp > 5){ → 7 > 5  
    int bonus = (sal * 5)/100;  
    System.out.println(bonus);  
}else{  
    System.out.println(0);  
}
```

$$\frac{50000 \times 5}{100}$$

2500

Memory

50k	7	2500
sal	exp	bonus