

# 45 mins → Hackerrank Question

# Rest → "Nested - If-Else"

# Hackerrank Challenges

→ if-Else with Logical Operator

## 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 class

marks = 78

marks → input

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

else if (marks > 40 && marks ≤ 60) → below par

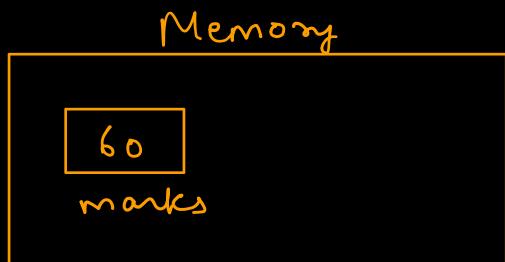
else → none of the above

```

8     Scanner scn = new Scanner(System.in);
9     int marks = scn.nextInt(); → Go
10    if(marks > 90){ → false
11        System.out.println("excellent"); skip
12    }else if(marks > 80 && marks <= 90){ → false
13        System.out.println("good"); skip
14    }else if(marks > 70 && marks <= 80){ → false
15        System.out.println("fair");
16    }else if(marks > 60 && marks <= 70){ → false
17        → System.out.println("meets expectations");
18    }else if(marks > 40 && marks <= 60){ → true
19        System.out.println("below par"); ✓
20    }else{
21        System.out.println("failed");
22    }
23
24

```

below par



## 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**

For each test case, You will be given the number of units in the integer format.

Sample Input 0  
15 → unit  
Sample Output 0  
1350

$$\begin{aligned} \text{unit} &= 15 \times 100 \\ \text{Total Cost} &= 1500 \end{aligned}$$

$$\begin{aligned} \text{discount} &= (1500 * 10) / 100 \\ &= 150 \\ \text{Total Cost} &= \text{Total Cost} - \text{discount} \\ &= 1500 - 150 = 1350 \end{aligned}$$

Sample Input 1  
10 → (10) unit  
Sample Output 1  
1800  
Sample Input 2  
9  
Sample Output 2  
900 ✓

$$\begin{array}{l}
 11 \rightarrow 11 \times 10 = 1100 > 1000 \\
 \downarrow 10\% \\
 110 \\
 = 1100 - 110 \\
 = 990
 \end{array}$$

11  
10 pen  
1000  
990 ✓

Scanner scn →

```

int unit → input 11
int cost = unit * 100 = 1100 ✓
if (cost > 1000){
    int discount = (cost * 10) / 100;
    cost -= discount;
}
print(cost);
  
```

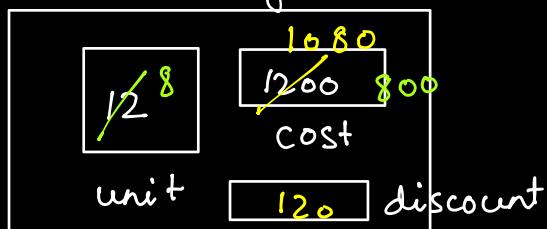
✓  $\text{cost} = \frac{\text{cost} - \text{discount}}{1100 - 110}$   
 $= 990$

```

/* Enter your code here. Read input from
Scanner scn = new Scanner(System.in);
int unit = scn.nextInt(); → 12 → 8
int cost = unit * 100; → 800
if(cost > 1000){ 1200 > 1000
    int discount = (cost * 10) / 100; 1200 * 10 = 12000
    cost = cost - discount; → 1080
}
System.out.println(cost); → 800
  
```

1080

Memory



# Print Bonus

Problem

Submissions

Leaderboard

Discussions

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.

$$(\text{Salary} * 5) / 100 \quad (> 5)$$

input → salary → 10K → 5% bonus  
→ yoe → 6      else → 0 ;

company  
salary →  
yoe → 5 above → 5% bonus  
else → 0

```
Scanner scn = new Scanner(System.in);
int salary = scn.nextInt(); 20000
int year = scn.nextInt(); 6
if(year > 5){ → true       $20000 \times 5 = 1000$ 
    int bonus = (salary * 5) / 100;
    System.out.println(bonus); ✓
}else{
    System.out.println(0);
}
```

Sample Input 0

20000 ✓  
6 ✓

Sample Output 0

1000 ✓

# Print the oldest among three

Problem

Submissions

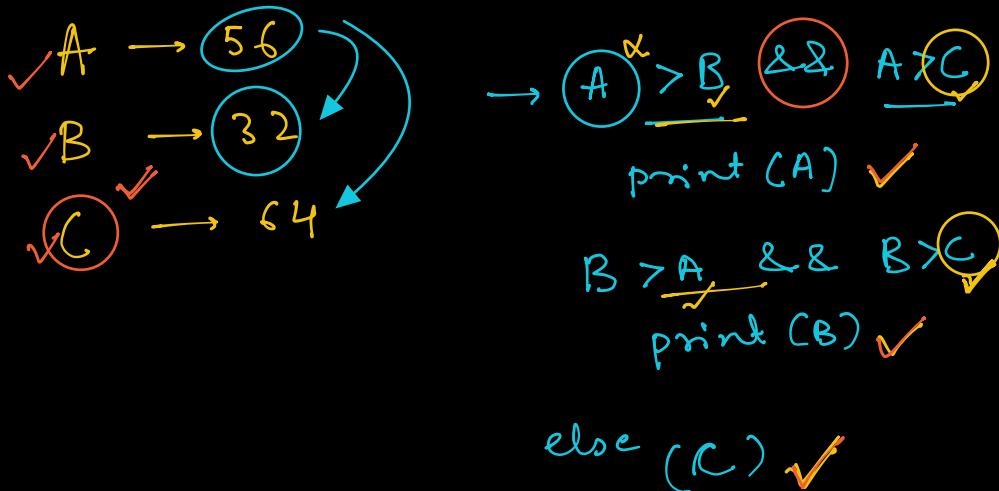
Leaderboard

Discussions

There are three friends A,B,C. You will be given the ages of these three friends as an integer input, you have to print the same of the oldest friend among them.

Input Format

For each test case, you will be given Age of A in the first line as an integer input Age of B in the second line as an integer input Age of C in the third line as an integer input



```
/* Enter your code here. Read input from STDIN.
Scanner scn = new Scanner(System.in);
int A = scn.nextInt();
int B = scn.nextInt();
int C = scn.nextInt();
if(A > B && A > C){
    System.out.println("A");
} else if(B > A && B > C){
    System.out.println("B");
} else{
    System.out.println("C");
}
```

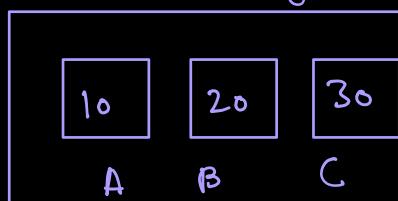
Sample Input 0

10  
20  
30

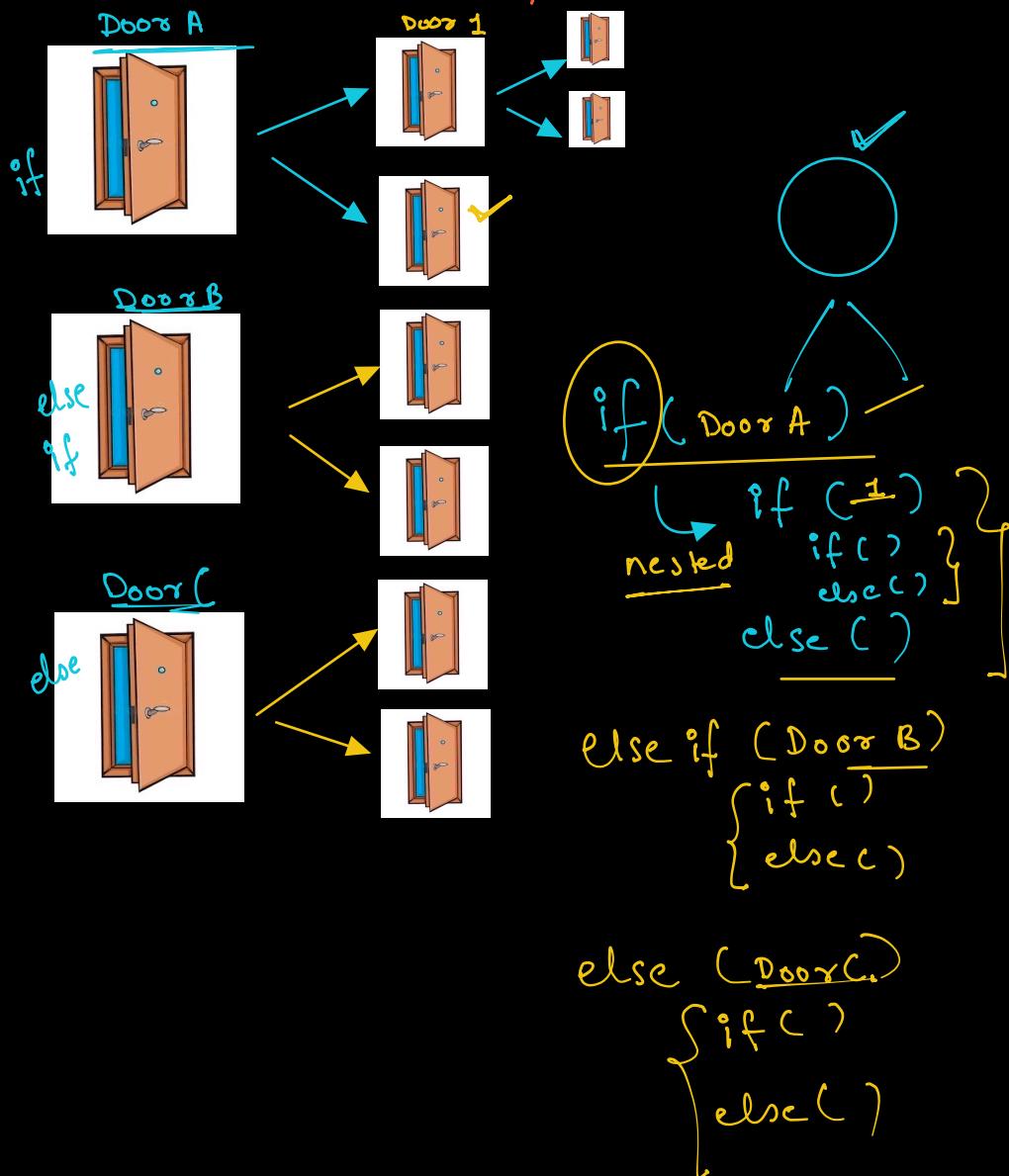
Sample Output 0

C

Memozy



## # Nested - If Else



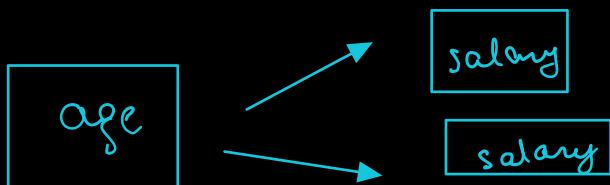
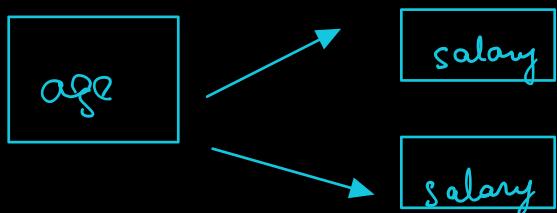
# HW\_Rich Adult Young

Problem Submissions Leaderboard Discussions

Take the age and salary of a person as an integer input, If the age is above 40 then  
a. If the salary is greater than or equal to 30,000 then print "You are rich and adult"  
b. Else print "You are an adult"

Else if age is less than or equal to 40  
a. If the salary is greater than or equal to 12,000, then print "You are rich and young"  
b. Else print "You are young"

```
if (age > 40) // age
    if (salary)
        print ("rich&adult")
    else
        print ("You are an adult");
else // age ≤ 40
    if (salary ≥ 12000)
        print ()
    else
        print ()
```



```

/* Enter your code here. Read input from STDIN. Print output to STDOUT */
Scanner scn = new Scanner(System.in);
int age = scn.nextInt(); 35 41
int salary = scn.nextInt(); 10000 30000
if(age > 40){ 35 > 40 41 > 40
    if(salary >= 30000){
        System.out.println("You are rich and adult");
    }else{
        System.out.println("You are an adult");
    }
}else{ 10k >= 12k
    if(salary >= 12000){
        System.out.println("You are rich and young");
    }else{
        Solved: 2
        Attempted: 3
        System.out.println("You are young");
    }
}

```

You are young

Sample Input 1

35  
10000

Sample Output 1

You are young

Sample Input 2

41  
30000

Sample Output 2

You are rich and adult ✓

## Print final z

Problem

Submissions

Leaderboard

Discussions

Take input three numbers  $x, y, z$  as integer input

$x$   $y$   $z$  } input

$(x > 20) \checkmark$

Then if the value of  $x$  is greater than or equal to 20,

- a. If the value of  $y$  is greater than or equal to 100 then add 100 to the value of  $z$ .
  - b. If the value of  $y$  is less than 100 and greater than or equal to 50, then add 50 to the value of  $z$ .
  - c. Else add 10 to the value of  $z$ .
- Else if the value of  $x$  is less than 20,
- Outer
- a. If the value of  $y$  is greater than or equal to 100 then add 3 to the value of  $z$ .
  - b. If the value of  $y$  is less than 100 and greater than or equal to 50, then add 2 to the value of  $z$ .
  - c. Else add 1 to the value of  $z$ .

Print the final value of  $z$  as an integer output in the end.

Sample Input 1

```

22 x -- ✓
55 y --
40 z --
40 + 50 = 90

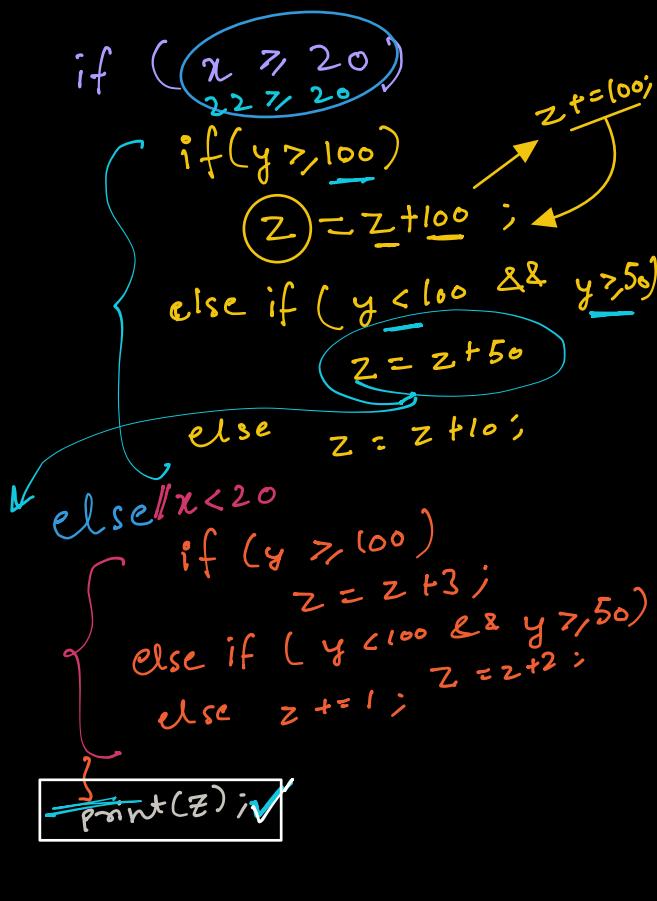
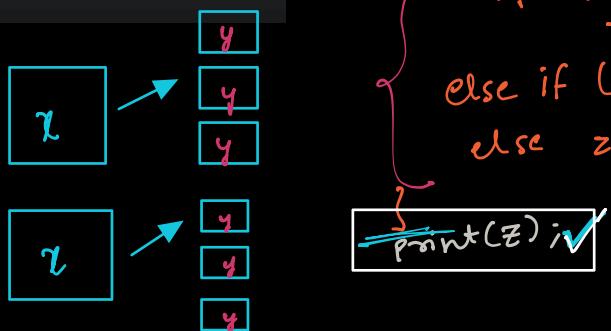
```

Sample Output 1

```

90

```



```

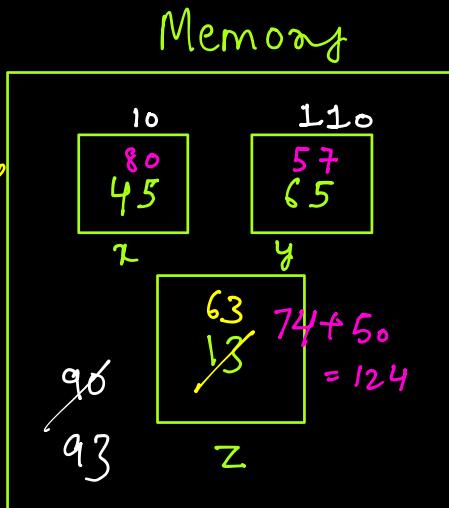
Scanner scn = new Scanner(System.in);
int x = scn.nextInt();
int y = scn.nextInt();
int z = scn.nextInt();

```

```

if(x>=20){✓ 45>20
    if(y>=100){ No
        z = z + 100;
    }else if(y< 100 && y>=50){ //true
        z = z + 50;
    }else{
        z = z + 10;
    }
}else{ // 10 < 20 110 > 100
    if(y>=100){
        z+=3;
    }else if(y< 100 && y>=50){
        skip
    }else{
        z+=1;
    }
}
System.out.println(z);✓ → 63 point

```



# Tell about x y

Problem

Submissions

Leaderboard

Discussions

Take in two inputs x and y from the user, and then

a. If the value of x is greater than or equal to 59 and y is greater than or equal to 10, then print "X is greater than or equal to 59 and y is greater than or equal to 10"

b. If the value of x is greater than or equal to 50 and y is less than 10, then print "X is greater than or equal to 50 and y is less than 10"

c. Else print "None of the condition matches"

```
if (x >= 59 && y >= 10)
    print()
else if (x >= 50 && y < 10)
    print()
else
    print()
```

```
Scanner scn = new Scanner(System.in);
int x = scn.nextInt();
int y = scn.nextInt();
if(x>=59 && y>=10){
    System.out.println("X is greater than or equal to 59 and y is greater than or equal to 10");
} else if(x >= 50 && y < 10){
    System.out.println("X is greater than or equal to 50 and y is less than 10");
} else{
    System.out.println("None of the condition matches");
}
```

Solved. 2