

• Ternary Operator

live Doubt support

ternary operator

✓ Scanner scn = new Scanner(System.in);
✓ int n = scn.nextInt(); true
System.out.println(n >= 18 ? "Adult" : "Below age"); false (else)
test cond?

Scanner scn = new Scanner(System.in);
int age = scn.nextInt();

if(age >= 18){
 System.out.println("Adult");
} else{
 System.out.println("Below age");
}

if → else

Syntax → test condition ? ' — ' : ' — '

logical operator with if - else

✓ 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.

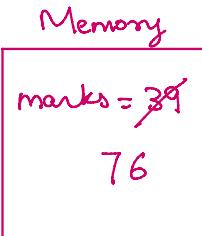
ternary
if - else

int marks → input
marks > 90 → "excellent"
marks > 80 & marks ≤ 90
"good"
marks > 70 & marks ≤ 80
"fair"
marks > 60 & marks ≤ 70
"meets expectations"
marks > 40 & marks ≤ 60
"below par"
else print → "failed"

```

Scanner scn = new Scanner(System.in);
int marks = scn.nextInt(); ✓
if(marks > 90){ ✓
    System.out.println("excellent"); ✗ ✗
} else if(marks > 80 && marks <=90){ ✓ ✗
    System.out.println("good"); ✗
} else if(marks > 70 && marks <=80){ ✓
    System.out.println("fair"); ✗
} else if(marks > 60 && marks <=70){ ✓
    System.out.println("meets expectations"); ✗
} else if(marks > 40 && marks <=60){ ✓
    System.out.println("below par"); ✗
} else {
    System.out.println("failed"); ✓
}

```



Output: failed
fair

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.

int num → input

the cost of each unit will always be 100

if 15 × 100 = 1500 > 1000
 total cost > 1000 You will get 10% discount

1500 - 10% of 1500 = 1500 - 1000
 10 per 1100 - 110
 11 per = 990

900 → else

Sample Input 0

15

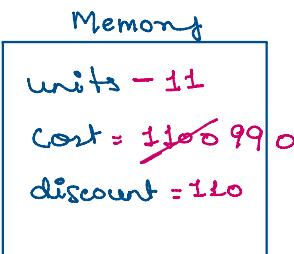
Sample Output 0

1350

```

Scanner scn = new Scanner(System.in);
int units = scn.nextInt();
int cost = units * 100;      11 × 100 = 1100
if(cost > 1000){
    int discount = (cost * 10)/100;
    cost = cost - discount;      1100 - 110
    System.out.println(cost);      = 990
}

```



```

cost = cost - discount; => 1100 - 110
System.out.println(cost); = 990
}else{
    System.out.println(cost);
}

```

```

Scanner scn = new Scanner(System.in);
int units = scn.nextInt();
int cost = units * 100; → 54 * 100 = 5400
if(cost > 1000){
    int discount = (cost * 10)/100;
    cost = cost - discount; = 5400 - 540
    System.out.println(cost); = 4860
}else{
    System.out.println(cost);
}

```

Memory

units = 54
cost = 5400
discount = 540

Print Bonus

Problem Submissions Leaderboard Discussions

The bonus in a company is given by $Bonus = \text{Salary} * (5 / 100)$. 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.

Sample Input 0

{ 20000 → salary
6 → yrs

Sample Output 0



```

if(yrs > 5)
    bonus = salary * 5%
else
    bonus = 0

```

```

Scanner scn = new Scanner(System.in);
int salary = scn.nextInt(); 20k
int years = scn.nextInt(); 4
if(years > 5){
    int bonus = (salary * 5)/100;
    System.out.println(bonus);
}else{
    int bonus = 0;
    System.out.println(bonus);
}

```

Memory

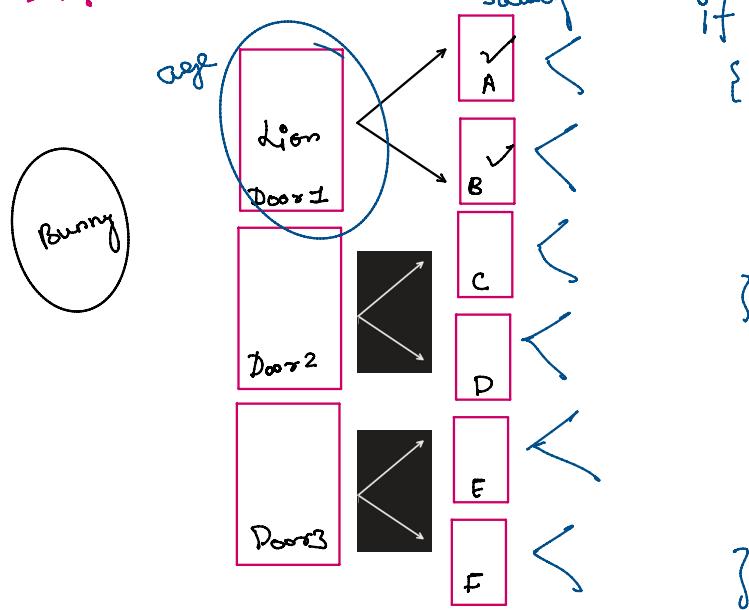
Salary → 20k	→ 60k
years → 4	→ 7 · 3000
bonus → 0	→ $\frac{60 + 5}{100} 20$
3000	

```

int bonus = 0;
System.out.println(bonus);
}

```

Nested if - Else



```

if ( _____ )
{
    if ( _____ )
        else ( salary )
    else {
        if ( _____ )
            else ( _____ )
    }
}

```

Rich Adult Young

Problem	Submissions	Leaderboard	Discussions
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Take the age and salary of a person as an integer input. If the age is above 40 then

- If the salary is greater than or equal to 30,000 then print "You are rich and adult"
- Else print "You are an adult"

Else if age is less than or equal to 40

- If the salary is greater than or equal to 12,000, then print "You are rich and young"
- Else print "You are young"

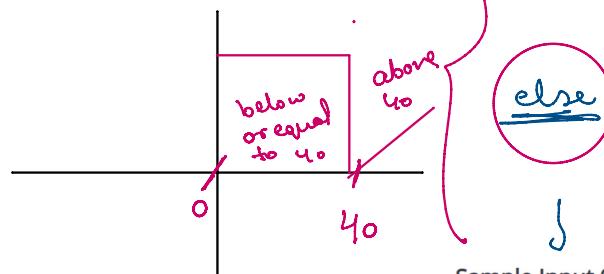
40+ <40

Sample Input 0

{ 45 → age
35000 → salary }

Sample Output 0

age → outer statement
salary → inner st.
You are rich and adult



```

if ( age > 40 )
{
    if ( salary >= 30000 )
        print "You are rich and adult";
    else
        print "you are adult";
}
else
{
    if ( salary >= 12000 )
        print "you are rich and young";
    else
        print "you are young";
}

```



 Scanner scn = new Scanner(System.in);
 int age = scn.nextInt();
 int salary = scn.nextInt();
 if(age > 40){
 if(salary >= 30000){
 System.out.println("You are rich and adult");
 }else{
 System.out.println("You are an adult");
 }
 }else{
 if(salary >= 12000){
 System.out.println("You are rich and young");
 }else{
 System.out.println("You are young");
 }
 }

o

40

l

Sample Input 0

45 — age
35000 — salary

young
ess "you are young"

Sample Output 0

You are rich and adult ✓

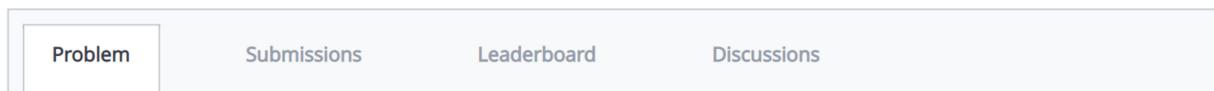
Sample Input 1

35 ✓
10000 ✓

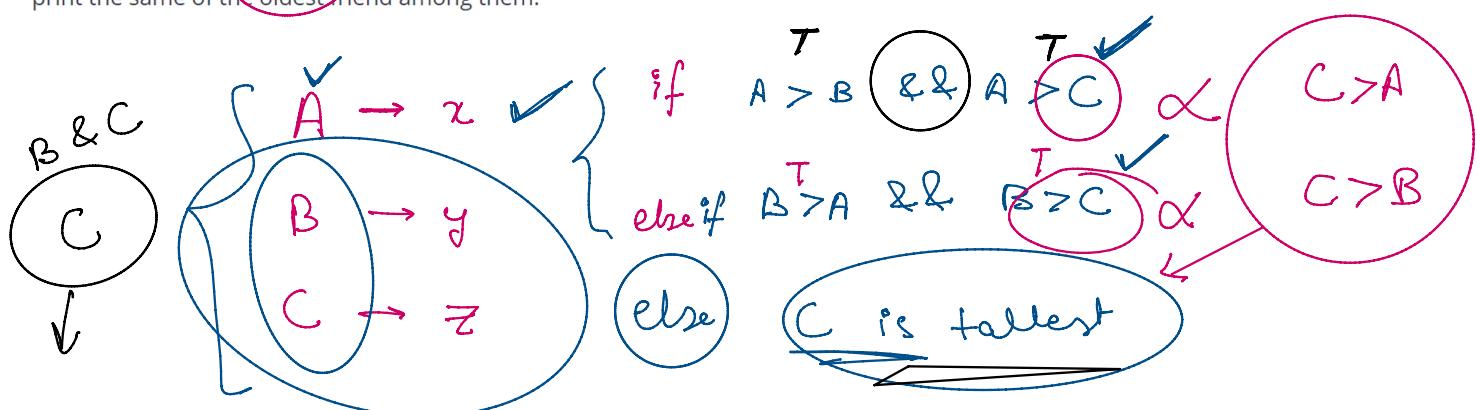
Sample Output 1

You are young ✓

Print the oldest among three



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.



```

Scanner scn = new Scanner(System.in);
int A = scn.nextInt(); 10
int B = scn.nextInt(); 20
int C = scn.nextInt(); 30
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

Print final z

Problem Submissions Leaderboard Discussions

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

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,

- 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 Output 0

C ✓

x-y-z → input

```

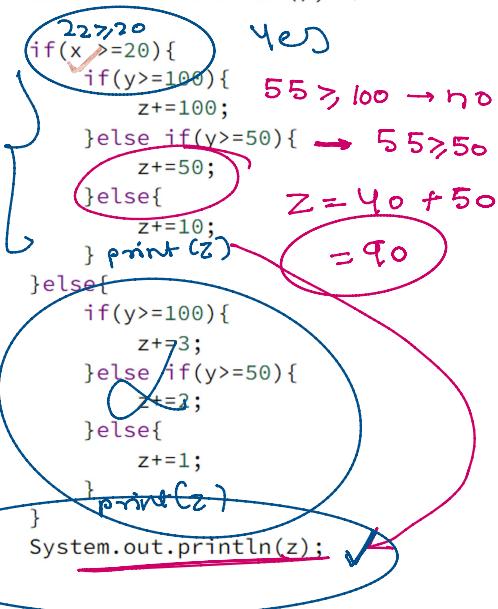
if x ≥ 20 {
    if y ≥ 100 {
        z = z + 100;
    } else if y < 100 & y ≥ 50
        z = z + 50
    } else
        z = z + 10
} else {
    if y ≥ 100
        z = z + 3
    } else if y < 100 & y ≥ 50
        z = z + 2
    } else
        z = z + 1
}

```

```

Scanner scn = new Scanner(System.in);
int x = scn.nextInt(); 30
int y = scn.nextInt(); 120
int z = scn.nextInt(); 30

```



Sample Input 1

$22 \rightarrow x$
 $55 \rightarrow y$
 $40 \rightarrow z$

Memory

$x = 22$
 $y = 55$
 $z = 40$

Sample Output 1

90 ✓

Sample Input 0

30
 120
 30 — —

Sample Output 0

130

