

Rich Adult Young

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

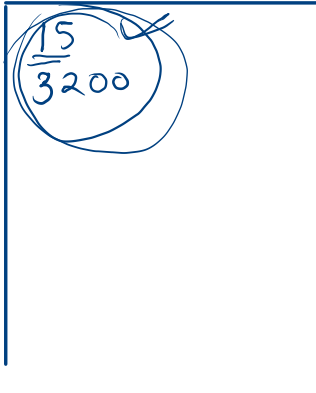
- If the **salary is greater than or equal to 12,000**, then print **You are rich and young**
- Else print **You are young**

Sample Input 0

```
45
35000
```

Sample Output 0

```
You are rich and adult
```



i/p age
sal

if (age > 40)
{

if (sal >= 30k)
else
 p

}

else {

if sal >= 12k
else

}

```
1 import java.io.*;
2 import java.util.*;
3
4 public class Solution {
5
6     public static void main(String[] args) {
7         Scanner scn = new Scanner(System.in);
8         int age = scn.nextInt();
9         int sal = scn.nextInt();
10
11         if(age > 40){
12             //a,b
13             if(sal >= 30000){
14                 System.out.println("You are rich and adult");
15             }else{
16                 System.out.println("You are an adult");
17             }
18         }
19         else if(age <= 40){    //else{}
20             if(sal >= 12000){
21                 System.out.println("You are rich and young");
22             }else{
23                 System.out.println("You are young");
24             }
25         }
26     }
27 }
```

Print final z

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.

y
}

x
↓
z

if

$x \geq 20$

else

```

1 import java.io.*;
2 import java.util.*;
3
4 public class Solution {
5
6     public static void main(String[] args) {
7         Scanner scn = new Scanner(System.in);
8         int x = scn.nextInt();
9         int y = scn.nextInt();
10        int z = scn.nextInt();
11
12        if(x >= 20){
13            //abc
14            if(y >= 100){
15                z = z + 100;
16            }else if(y >= 50){
17                z = z + 50;
18            }else{
19                z = z + 10;
20            }
21        }else if(x < 20){ //else
22            //abc
23            if(y >= 100){
24                z = z + 3;
25            }else if(y >= 50){
26                z = z + 2;
27            }else{
28                z = z + 1;
29            }
30        }
31
32        System.out.println(z);
33    }
34 }
35 }

```

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.

Math.max

```
1
2 public class Main
3 {
4     public static void main(String[] args) {
5
6         int ans = Math.max(4,7);
7         System.out.println(ans);
8
9
10
11     }
12 }
13
```

Math.min

```
1
2 public class Main
3 {
4     public static void main(String[] args) {
5         System.out.println( Math.min(4, 7));
6
7
8
9     }
10 }
11
```

infinity $(\infty) \rightarrow$ very large value.

$$x = 50$$

$$\text{Math.min}(50, \infty) = 50$$

$$\text{Math.min}(x, \infty) = x$$

-infinity $(-\infty) \rightarrow$ very small value.

$$x = 50$$

$$\text{Math.max}(-\infty, 50) = 50$$

$$\text{Math.max}(-\infty, x) = x$$

$$x + 0 = x$$

$$x \cdot 1 = x$$

runner up 3

★ Hw. Solve \rightarrow if else if else
nested.

Problem

Submissions

Leaderboard

Discussions

Three numbers **A**, **B** and **C** are the inputs. Write a program to find **second largest** among them.

Sample Input 0

120
11
400

Sample Output 0

120

logic 2nd max.?

min = 11

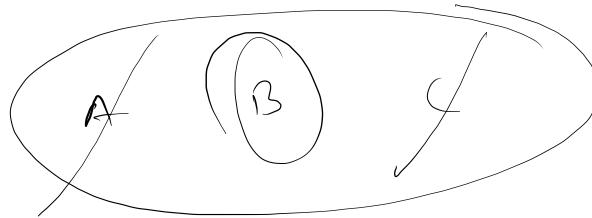
max = 400

sum = 531

logic

sum - max - min

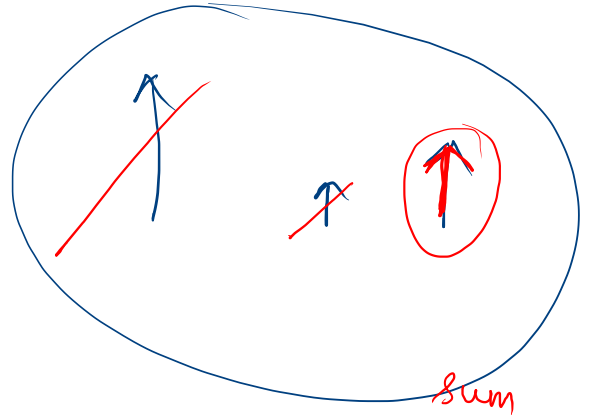
= 531 - 400 - 11
=



Submitted Code

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         Scanner scn = new Scanner(System.in);
8         int A = scn.nextInt();
9         int B = scn.nextInt();
10        int C = scn.nextInt();
11
12        int max = Math.max(A, Math.max(B, C));
13        int min = Math.min(A, Math.min(B, C));
14        int sum = A + B + C;
15
16        System.out.println(sum - max - min);
17    }
18 }
```



int age = 52;
double wt = 108.2;
boolean val = true; (true/false)

```
1  
2 public class Main  
3 {  
4     public static void main(String[] args) {  
5         boolean val = true;  
6         boolean val2 = false;  
7  
8         System.out.println(val);  
9         System.out.println(val2);  
10  
11  
12     }  
13 }  
14
```

logical Operators

or (||)

Maths
+

and (&&) --- X

Truth Table of (OR)

↪ * my one is true \Rightarrow answer = true

x	y	ans
T	T	T
F	T	T
T	F	T
F	F	F

eg. $\underbrace{(4 < 7)}_T \parallel (2 > 9)$
 T F

eg. $(10 == 100)_F \parallel (2 < 1)_F$

Truth Table of &&

* * all are true

\Rightarrow answer = true

x	y	ans
F	F	F
F	T	F
T	(F)	F
T	T	T

eg. $(2 < 3)$ $\&\&$ $(4 < 5)$
 \perp $\&\&$ \top

eg. $(4 > 5)$ $\&\&$ $(2 == 2)$
 \perp \top

Tell about x y

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**

Sample Input 0

```
60
12
```

Sample Output 0

```
X is greater than or equal to 59 and y is greater than or equal to 10
```

i/p { x y

if $x \geq 59$ && $y \geq 10$

else if $x \geq 50$ && $y < 10$

else

```
1 import java.io.*;
2 import java.util.*;
3
4 public class Solution {
5
6     public static void main(String[] args) {
7         Scanner scn = new Scanner(System.in);
8         int x = scn.nextInt();
9         int y = scn.nextInt();
10
11         if(x >= 59 && y >= 10){
12             System.out.println("X is greater than or equal to 59 and y is greater than or equal to 10");
13         }else if(x >= 50 && y < 10){
14             System.out.println("X is greater than or equal to 50 and y is less than 10");
15         }else{
16             System.out.println("None of the condition matches");
17         }
18     }
19 }
20 }
```