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.
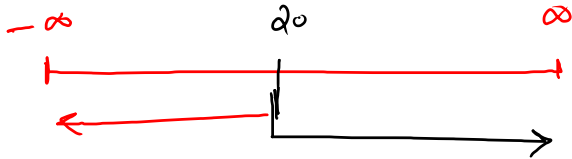

```
int x =
int y =
int z =

if ( x >= 20) {
    if (y >= 100){
        z += 100;
    } else if ( y < 100 && y >= 50){
        z += 50;
    } else {
        z += 10;
    }
} else if ( x < 20){
    if ( y >= 100 ){
        z += 3;
    } else if ( y < 100 && y >= 50) {
        z += 2;
    } else {
        z += 1;
    }
}
```

```java
public static void main(String[] args) {
    Scanner scn = new Scanner(System.in);
    int x = scn.nextInt();
    int y = scn.nextInt();
    int z = scn.nextInt();

    if ( x >= 20 ) {
        if ( y >= 100 ) {
            z += 100;
        } else if ( y < 100 && y >= 50 ) {
            z += 50;
        } else {
            z += 10;
        }
    } else if (x < 20) {
        if ( y >= 100 ) {
            z += 3;
        } else if ( y < 100 && y >= 50 ) {
            z += 2;
        } else {
            z += 1;
        }
    }
    System.out.println(z);
}
```

Indentation

end

runner up 3

$$A = 10, \quad B = 20, \quad C = 30$$

(psudo code)

assume
A is 2nd
largest :- $\boxed{B < A < C}$ OR $\boxed{B > A > C}$

assume
B is 2nd
largest :- $A < B < C$ OR $A > B > C$

assume
C is 2nd
largest :- $A < C < B$ OR $A > C > B$

Code

```java
public static void main(String[] args) {
    Scanner scn = new Scanner(System.in);
    int A = scn.nextInt();
    int B = scn.nextInt();
    int C = scn.nextInt();

    if ( (B < A && A < C) || (B > A && A > C) ) {
        System.out.println(A);
    } else if ( (A < B && B < C) || (A > B && B > C) ) {
        System.out.println(B);
    } else if ( (A < C && C < B) || (A > C && C > B) ) {
        System.out.println(C);
    }

}
```

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   *a*

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   *b*

c. Else print **None of the condition matches**   *c*

i/p

$$x = 60, \quad y = 12$$

psudo code

```
if ( x >= 59  && y >= 10) {
        Syso(a);
} else if ( x >= 50 && y < 10) {
        Syso(b);
} else {
        Syso(c);
}
```

code

```java
public static void main(String[] args) {
    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");
    }
}
```

Print the final incremented salary

↳ we can have multiple condition using logical operator

Take in three inputs **age**, **salary**, **experience**, then

a. If **age** is greater than **60** and **salary** is greater than **20,000** and **experience** is greater than **20 years**, then **add 5000 to the salary.**

b. If **age** is greater than **40** and **salary** is greater than **15,000** and **experience** is greater than **10 years**, then **add 2000 to the salary.**

c. If **age** is greater than **30** and **salary** is greater than **10,000** and experience is greater than **5 years**, then **add 1000 to the salary.**

d. Otherwise **add 500 to the salary.**

In the end Print the **final salary.**

i/p

#	
age	45 ✓
salary	20000 ✓ + 2000
exp.	11 ✓

if (age > 60 && salary > 20000 && exp > 20) {

     Salary += 5000 ;

} else if (age > 40 && salary > 15000 && exp>10){

     Salary += 2000 ;

} else if (age > 30 && Salary > 10000 && exp > 5) {

     Salary += 1000 ;

} else {

     salary += 500 ;

}

code

```java
public static void main(String[] args) {
    Scanner scn = new Scanner(System.in);
    int age = scn.nextInt();
    int salary = scn.nextInt();
    int exp = scn.nextInt();

    if ( age > 60 && salary > 20000 && exp > 20 ) {
        salary += 5000;
    } else if ( age > 40 && salary > 15000 && exp > 10 ) {
        salary += 2000;
    } else if ( age > 30 && salary > 10000 && exp > 5 ) {
        salary += 1000;
    } else {
        salary += 500;
    }

    System.out.println(salary);
}
```
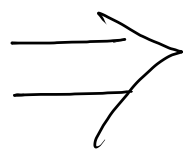
⟹ # Switch Statement (alternative of if else ladder)

Syntex

```
switch ( condition )
    case   val1 :
        // statement 1
        break;          ──────→ optional
    case   val2 :
        // statement 2
        break;
        ⋮
    default :  ──────────→ optional
        // statement
        break;
```

code

```java
public static void main(String[] args) {
    int i = 3;
    switch (i) {
        case 1:
            System.out.println("A");
            break;
        case 2:
            System.out.println("B");
            break;
        case 3:
            System.out.println("C");
            break;
        case 4:
            System.out.println("D");
            break;
        default:
            System.out.println("E");
            break;
    }
}
```

disadvantage

↳ only single variable can be checked