```
if( 4+5 == 10) {
    SOP( True)
} else {
    SOP ( False)
}
SOP (True)
```

Output

False

True

1) ~~gender == M and age == 21~~
   gender == F and age == 18

   M, 21 ✓
   M, 22 ×

2) ~~gender == M and age > 21~~
   gender == F and age > 18

   M, 23 F, 19 ✓
   M, 21 F, 18 ×

3) ✓ gender == M and age >= 21
   gender == F and age >= 18

4) ~~gender == M or age >= 21~~
   gender == F or age >= 18

   M, 21 ✓
   M, 5 ×

```
if ( x<y && x<z)
    SOP ("a")
else if ( y<x && y<z)
    SOP ("b")
else
    SOP ("c")
```

x=3 y=5
z=2

Output: c

Electricity Bill

Given an integer A → units of electricity consumed in the house

[0 - 50] ⇒ ₹ 0.5 / unit
[51 - 150] ⇒ ₹ 0.75 / unit
[151 —] ⇒ ₹ 1 / unit

Calculate bill amount

Ex 1 : A = 20

20 x 0.5 = ₹ 10

Ex 2 : A = 100

50 x 0.5 + 50 x 0.75

= 25 + 37.5 = ₹ 62.5

Ex 3 : A = 200

50 x 0.5 + 100 x 0.75 + 50 x 1

= 25 + 75 + 50

= 150

Bucket	Ex	Final ans

$A \leq 50$	20 30	$A \times 0.5$
$A > 50$ and $A \leq 150$	100 120	$50 \times 0.5 + (A-50) \times 0.75$
$A > 150$	200 250	$50 \times 0.5 + 100 \times 0.75$ $(A-150) \times 1$

```
if ( A <= 50) {
    SOP ( A*0.5)
}
else if ( A > 50 && A <= 150){
    SOP( 50*0.5 + (A-50) 0.75)
}
else {
    SOP ( 50*0.5 + 100*0.75 + (A-150)*1)
}
```

While Loop

```
SOP(1)
SOP(2)
SOP(3)
SOP(4)
SOP(5)
```

```
int i=1
SOP(i)
i=i+1
SOP(i)
i=i+1
```

```
int i=1
while( i <= 5){
    SOP(i)
    i=i+1
}
```

```
SOP(i)
i = i+1
SOP(i)
i = i+1
SOP(i)
i = i+1
```

Syntax

```
1   initialise loop variable
2   while ( loop condition ) {
3       // Write logic here
4       update loop variable
    }
```

```
1   int i = 1;
2   while ( i <= 5 ) {
3       SOP(i)
4       i = i+1
    }
```

Q: Write code to print first N positive integers

```
int n = scn.nextInt();
int i = 1;
while ( i <= n ){
        SOP(i);
        i++;    // ++i; i+=1;
}
```

Break – 10:10pm