

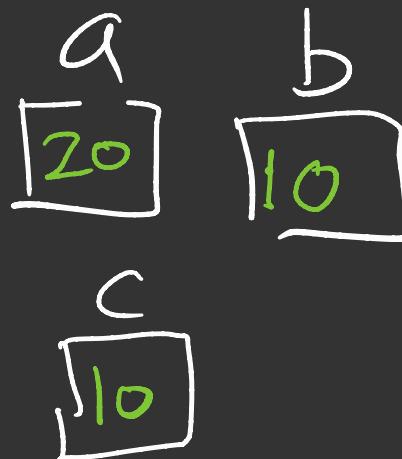
Decision Control Instruction

Day-7

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Write a program to swap values of two int type variables.

- ✓ $C = a;$
- ✓ $a = b;$
- ✓ $b = C;$



- ① Read Question & understand.
- ② Test case
- ③ Dry run

printf("%d %d", b, a);
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Control Instruction

- ① Decision Control Instruction
- ② Iterative Control Instruction
- ③ Switch case Control Instruction
- ④ goto Control Instruction

main()

{

 |

 |

 |

 |

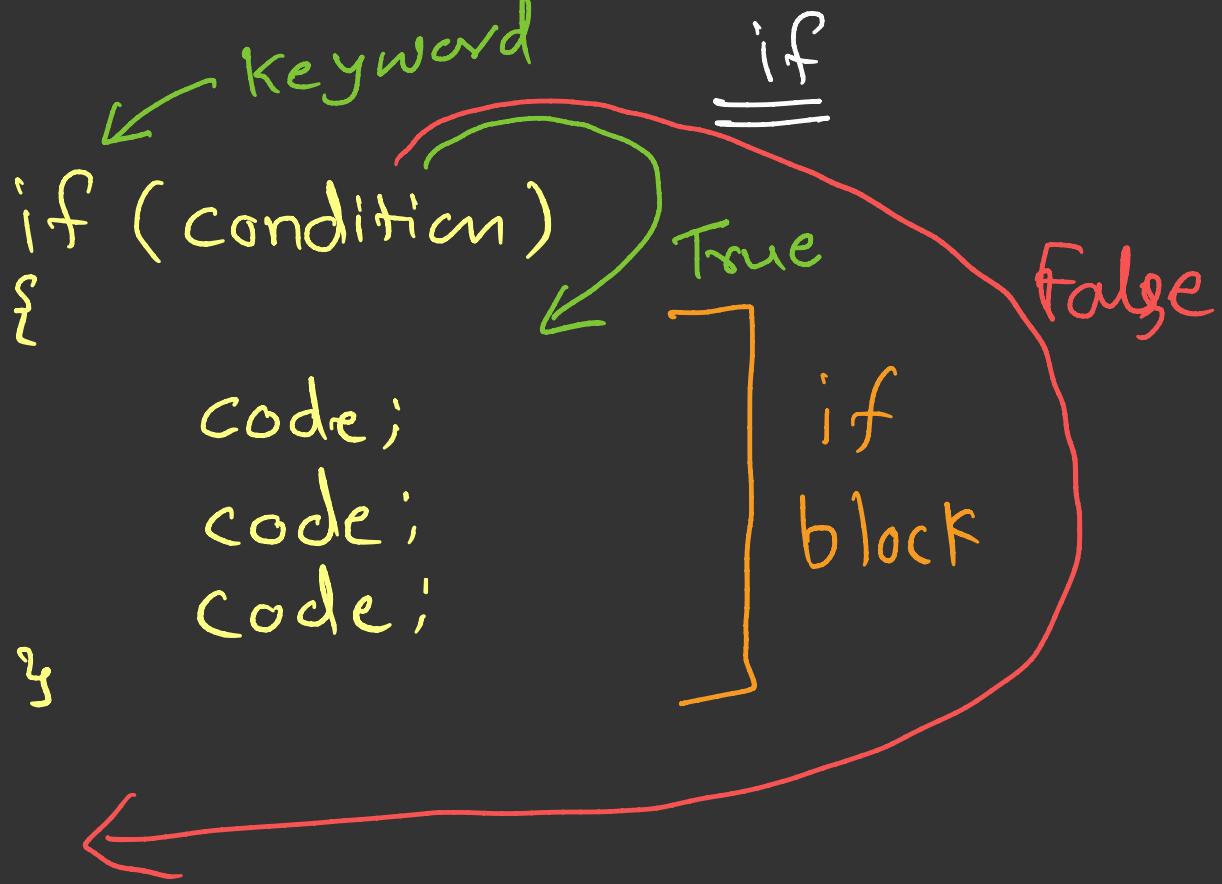
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}

Decision Control Instruction

-
- ① if (Selection Control Instruction)
 - ② if else
 - ③ ?: (conditional Operator)



Every Non-Zero
value is True

Zero is False

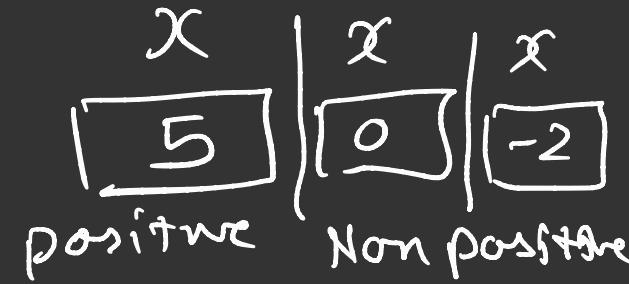
Write a program to check whether a given number is positive or non positive.

main()

{

```
int x;  
printf("Enter a number");  
scanf("%d", &x);  
if (x>0)  
{  
    printf("Positive");  
}  
if (x<=0)  
{  
    printf("Non-positive");  
}  
getch();
```

}



positive

zero
Negative

Non
positive

if else

```
if (condition)
{
    code ;
    code ;
    code ;
}
else
{
    code ;
    code ;
    code ;
}
```

The diagram illustrates the structure of an if-else statement. A red bracket labeled "if block" encloses the first three lines of code under the condition. A red bracket labeled "else block" encloses the three lines of code under the else clause. A green bracket labeled "if" connects the "if block" and the "else block". A green bracket labeled "condition" connects the opening parenthesis of the if statement and the code block. A red arrow points from the "else" keyword to the opening brace of the else block.

Write a program to check whether a given number is positive or non-positive.

main()

{

int x;

printf("Enter a number");

scanf("%d", &x);

if (x>0)

 printf("Positive");

else

 printf("Non-positive");

getch();

}

Conditional Operator (Ternary Operator)

? :

exp1 ? exp2 : exp3 ;

T → exp1

F → exp3

y = x > 0 ? 5 : 6 ;

y = 5

Write a program to check whether a given number is positive or non-positive.

main()

```
{ int x;  
    printf("Enter a number");  
    scanf("%d", &x);  
    x > 0 ? printf("Positive") : printf("Non-Positive");  
    getch();  
}
```

printf($x > 0 ? "positive" : "Non-positive"$);