



# Welcome to My Presentation



# **My Presentation Topic is**

# **Control Statements**

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# Topics

- ❑ Introduction to control statements.
- ❑ Types of Control statements.
- ❑ Decision making Statements.
- ❑ Loop Statements.
- ❑ Jump Statements.

# Introduction to Control Statements

- ▶ The statements in the code are executed according in which they appear.
- ▶ However, Java provides a statements that can be used to control the flow of Java code, such statements are called control flow statements.

# Types of Control Flow Statements

► Java provides three types of control flow statements:

1. Decision Making Statements.

2. Loop Statements.

3. Jump Statements.

# Control Statement

```
graph TD; CS[Control Statement] --> DMS[Decision making Statements]; CS --> LS[Looping Statements]; CS --> JS[Jump Statements]; DMS --> ifelse[if else]; DMS --> switchcase[switch case]; LS --> while[while]; LS --> dowhile[do while]; LS --> for[for]; JS --> break[break]; JS --> continue[continue];
```

Decision  
making  
Statements

Looping  
Statements

Jump  
Statements

if else

switch  
case

break

continue

while

do while

for

# Decision Making Statements

- ▶ Decision making statements decide which to execute and when.
- ▶ There are four decision making statements available in Java:

1. If

2. If-else

3. If-else-If or Nested if-else

4. Switch

# If Statements

- It's evaluate a Boolean expression and enables the program to enter a block of code if the expression true.

```
If(condition){  
    Statement 1 ;  
}
```



# If-else Statements

- ▶ In this statement, if the condition is true then If block execute. Otherwise Else block is execute.

```
if(condition){  
    statement 1;  
}  
else{  
    statement 2;  
}
```

# Nested If-else

- It is Chain of If-else statements that create a decision tree where the program may enter in the block basis of condition.

```
if(condition){  
    statement 1;  
    if{  
        statement 2;  
    }  
    else{  
        statement 3;  
    }  
}
```

# Switch

- Switch statement is used to execute a single statement from multiple conditions. It's similar to If-else-If but easier to use instead of If-else-If.

```
switch(grade){  
    case 'A':  
        System.out.print("A");  
        break;  
  
    case 'B':  
        System.out.print("B");  
        break;  
  
    case 'C':  
        System.out.print("C");  
        break;  
  
    default:  
        System.out.println(" Default");  
        break;  
}
```

# Loop Statement

- ▶ These are used to execute a block of statements multiple time. There are three types of loop statements:

- 1.For loop
- 2.While loop
- 3.Do-While loop

# For Loop

- ▶ It execute the program until condition is false. It is used when number of iteration are known.

```
for( i=0; i<5; i++){  
    System.out.println( "Hello World" );  
}
```

# While Loop

- ▶ While evaluates a certain condition. if the condition true, code is execute. This process continued until specified condition turns out to be false.

```
intitial;  
While(condition){  
    statement ;  
    increment/decrement;  
}
```

# Do-While Loop

- In do-while loop it will execute the loop first ,then it check the condition. So it will execute the loop at least once.

```
initial;  
do{  
    statement ;  
    statement ;  
}  
while(condition);
```

# Jump Statements

- ▶ Jump statements transfer the execution control to the other part of the program. There are two type of Jump statement in Java:

1. Break Statements

2. Continue Statements



# Break Statement

- Break statement in Java is used to terminate a loop and break the current flow of program.

```
for( i=0; i<100; i++){  
    System.out.println( i );  
    if( i==50 ){  
        break;  
    }  
}
```

# Continue Statement

- To jump to the next iteration of the loop, we make use of continue statement

```
for( i=0; i<10; i++){  
    for( j=i; j<5; j++){  
        if( j==4)  
            continue;  
    }  
    System.out.println(j);  
}
```

Thank You