Selenium WebDriver Training

Control Statements



The Golden Circle

What

How

What is Control statement?

The statements that define the flow of the program

Why is Control Statement required?

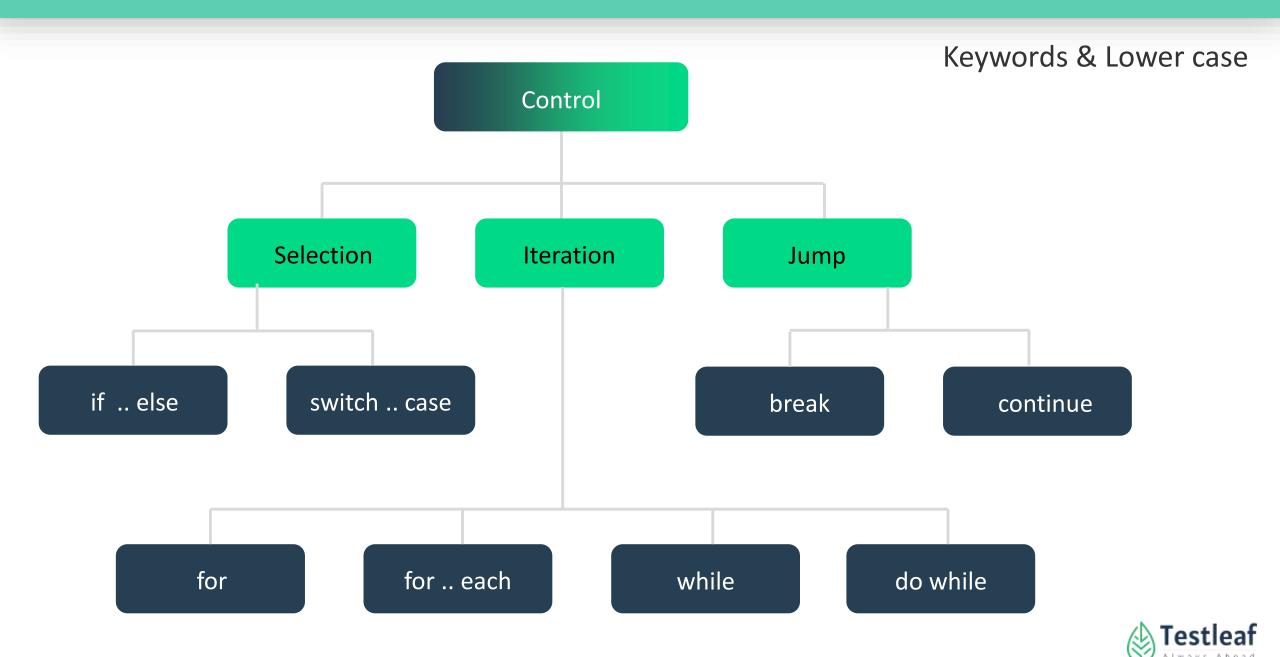
Provide a logic based flow like chrome based vs firefox based execution

How to implement Control Statements?

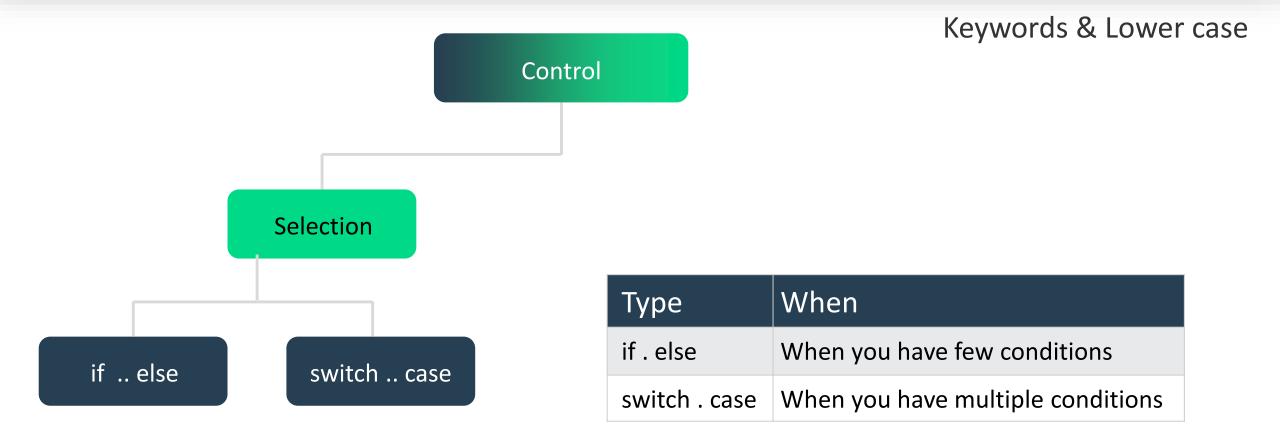
Jsing Selection, Iteration and Jump Statements



Control Statements



Selection Statements: When to use what?





Selection Statements: Examples

Keywords & Lower case Control Selection Type Example if . else Report pass or fail if .. else switch .. case switch . case Launch based on browser types

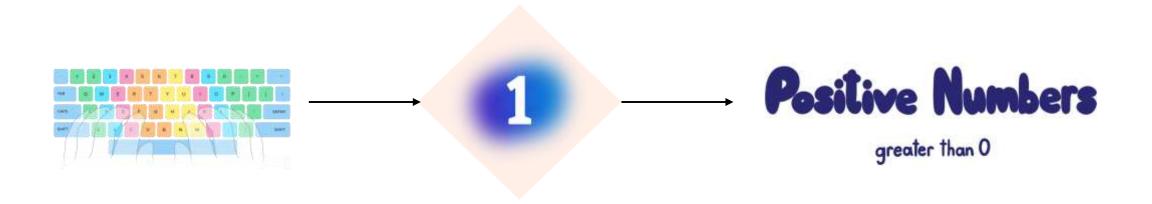


if .. else syntax

```
boolean
                expression
          if (x > y)
              int t = x;
sequence
statements
```



Lets write a sample code (positive number)





Nested if .. else syntax

```
if (income < 0) rate = 0.00;
else if (income < 8925) rate = 0.10;
else if (income < 36250) rate = 0.15;
else if (income < 87850) rate = 0.23;
else if (income < 183250) rate = 0.28;
else if (income < 398350) rate = 0.33;
else if (income < 400000) rate = 0.35;
else
                         rate = 0.396;
```

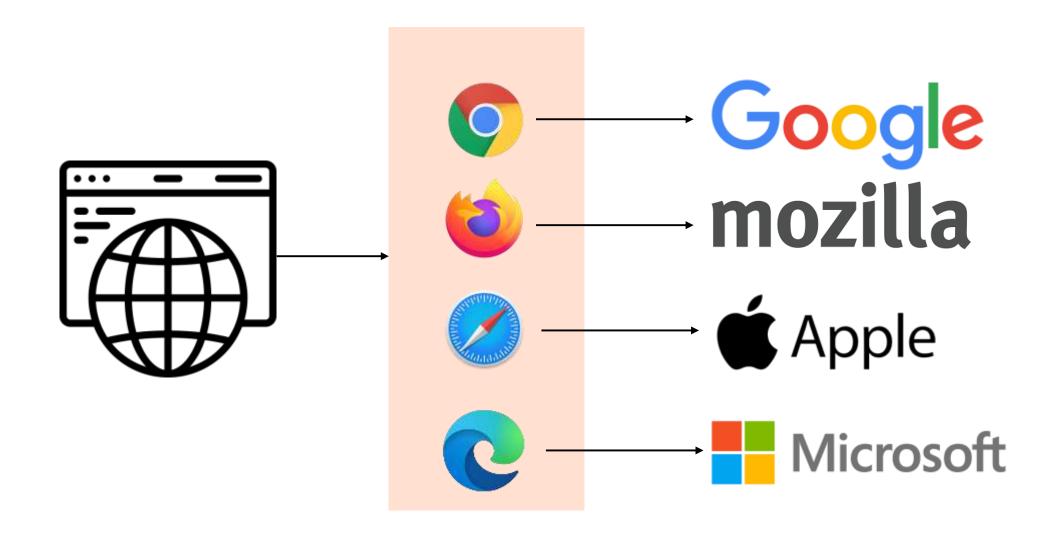


switch .. case syntax

```
switch (day) {
   case 0: System.out.println("Sun"); break;
   case 1: System.out.println("Mon"); break;
   case 2: System.out.println("Tue"); break;
   case 3: System.out.println("Wed"); break;
   case 4: System.out.println("Thu"); break;
   case 5: System.out.println("Fri"); break;
   case 6: System.out.println("Sat"); break;
```

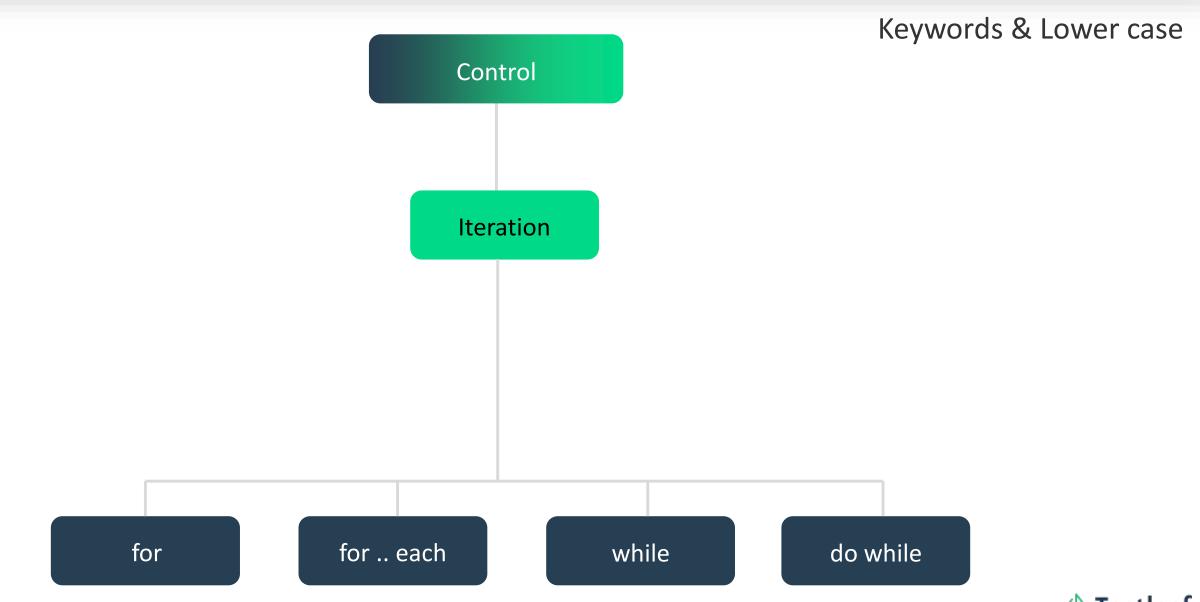


Lets write a sample code (browser vendor)





Control Statements





Loops (for syntax)

```
declare and initialize
                 a loop control variable
initialize another
  variable in a
                                      loop-
                                   continuation
   separate
                                                  increment
                                     condition
   statement
               int power = 1;
               for (int i = 0; i \le n;
                   System.out.println(i + " "
                                                         power);
                   power = 2*power;
                                       body
```



Lets write a sample code (print numbers 1 ... 10)



Operators (specific to integers)

values	integers between -2^{31} and $+2^{31}-1$							
typical literals			1234	99	0	1000000		
operations	sign	add	subtract		mu	ltiply	divide	remainder
operators	+ -	+	-	*		/	%	



 \blacktriangleright

Comparison Operators

op	meaning	true	false
==	equal	2 == 2	2 == 3
!=	not equal	3 != 2	2 != 2
<	less than	2 < 13	2 < 2
<=	less than or equal	2 <= 2	3 <= 2
>	greater than	13 > 2	2 > 13
>=	greater than or equal	3 >= 2	2 >= 3



Summary

- 3 types of control statements: Selection, Iteration and Jump
- **Selection**: if else vs switch case (performance oriented)
- **Iteration**: for (count based) vs while (condition based)
- **Jump**: break (out of iteration), continue (skip iteration)



Classroom Exercise (Breakout)

- Write a program to print only odd numbers between 1 to 20
- Before writing the code follow the 3 step process:
 - Understand the problem
 - Solve the problem (Using Pseudocode)
 - Write the code

