

CS 111

while for repeat decisions, loops, counters

Counters

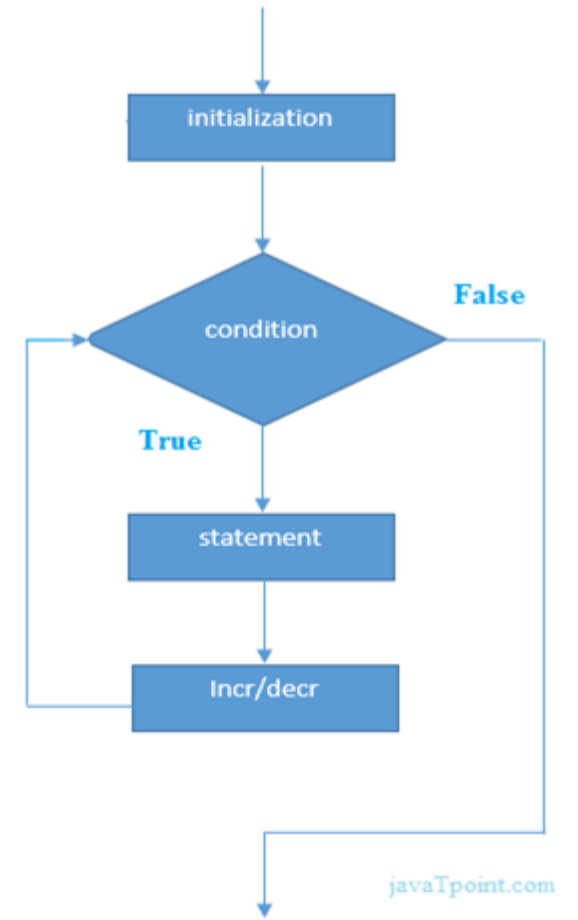
- While loops are typically used for repeating steps as long as a condition is true
 - Keep going until a counter reaches a particular value
 - Keep going until the user enters a certain value

Counters

- Sometimes we know in advance how many times we want to do something
 - Do something ten times
 - Get a positive number from a user and do something that many times

Example

- Print the squares of 1, 2, ..., 19, 20



8.1 Pseudocode

// Prints first 20 multiples of number entered by user

Declare variables for num and counter and initialize counter to 1

Read in num value from user

Validate user input using while loop

 If input is invalid, prompt user for new num value

While counter is less than or equal to 20

 Print counter times number to monitor

 Increment counter