WHILE Loops

1. Loops
2. WHILE loop
3. Debugging WHILE loop

Loops

1. Loops

Beep!

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1. Loops

```
boolean on= true; //It's alarm time

if (on){
        System.out.println("Beep");
}
```

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boolean on= true; //It's alarm time

if (on){
        System.out.println("Beep");
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}
```

1. Loops

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boolean on= true; //It's alarm time

if (on){
        System.out.println("Beep");
    on = //check alarm clock's snooze button (true/false)
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if (on){
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boolean on= true; //It's alarm time

if (on){
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if (on){
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}
…
```

1. Loops

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boolean on= true; //It's alarm time

if (on){
        System.out.println("Beep");
    on = //check alarm clock's snooze button (true/false)
}
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    on = //check alarm clock's snooze button (true/false)
}
if (on){
        System.out.println("Beep");
    on = //check alarm clock's snooze button (true/false)
}
… // 100 times!!
```

Java loops

WHILE loops

DO-WHILE loops

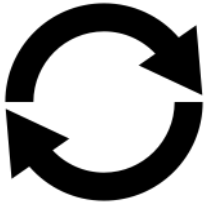
FOR loops

WHILE loop

2. WHILE loop

boolean value

```
while (condition) {
 //code block
 // will execute as long as condition is true
}
//more code
```



Iteration

2. WHILE loop

```
while (condition) {
 //code block
 // will execute as long as condition is true
}
//more code
```

WHILE

Mientras la condición se cumpla, haz esto

2. WHILE loop

```
while (condition) {
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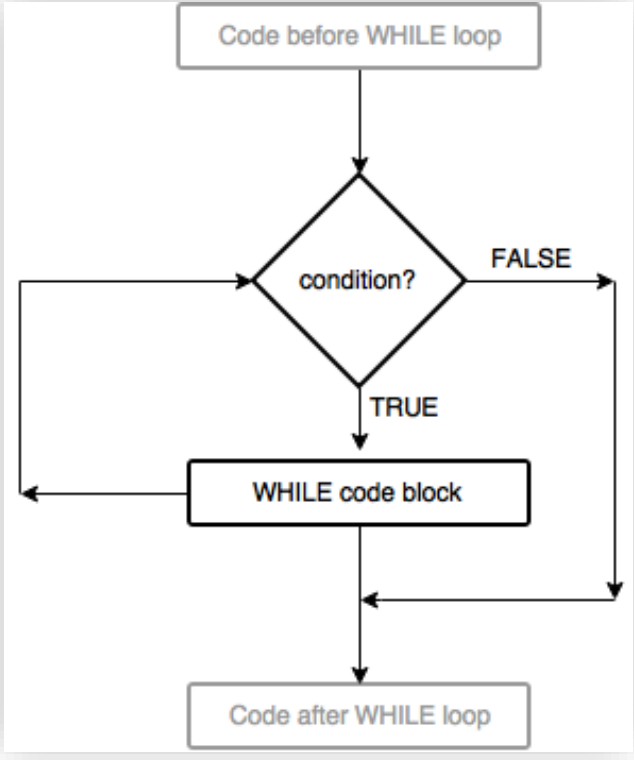
//more code
```



2. WHILE loop

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boolean on= true; //It's alarm time

if (on){
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}
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if (on){
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```

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```

Fewer lines of code!!

2. WHILE loop

```
boolean on= true; //It's alarm time

while (on){
        System.out.println("Beep");
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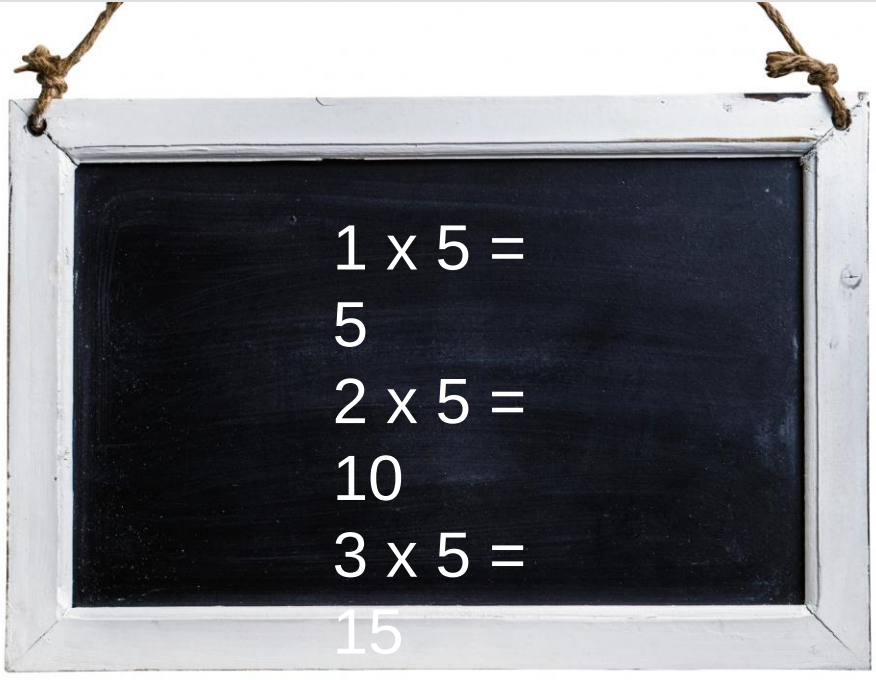
}
```

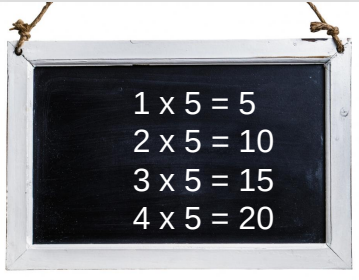
Control variable

2. WHILE loop



2. WHILE loop

```
// 0. Establecer qué tabla vamos a mostrar. Hemos seleccionado la tabla del 5
// 1. Mostrar resultado de multiplicar el número por 1
// 2. Mostrar resultado de multiplicar el número por 2
// 3. Mostrar resultado de multiplicar el número por 3
//…
// 10. Mostrar resultado de multiplicar el número por 10
```



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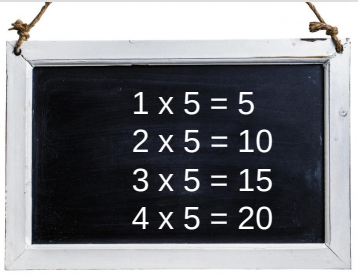
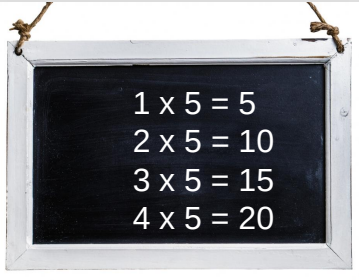


2. WHILE loop

```
final int TABLA=  5; //Tabla de multiplicar del número 5

int i = 1;

while (i<=10){
  System.out.println(i+” x ”+TABLA+” = ”+(i*TABLA));
  i++;
}
```



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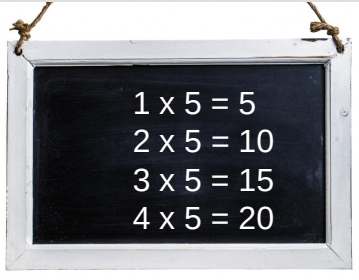

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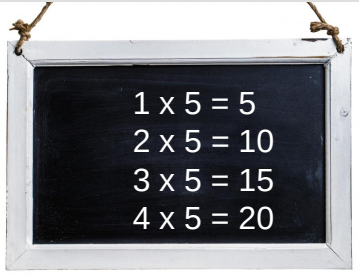
```

Loop counter



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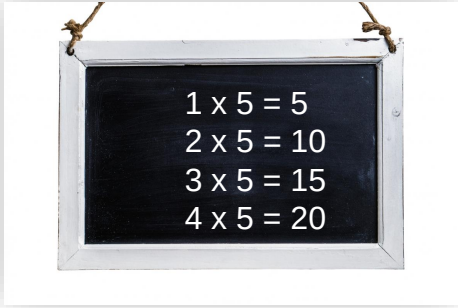

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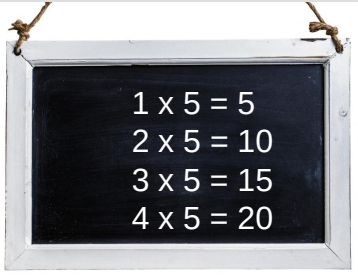
Loop condition



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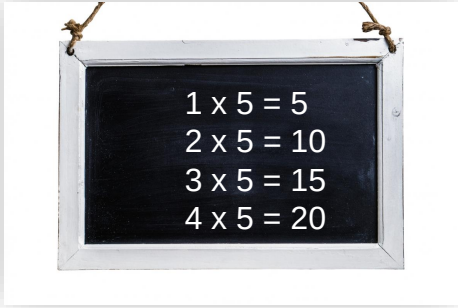
Loop increment



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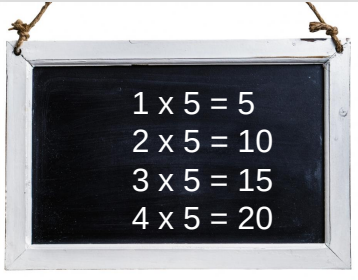
```

Loop counter=
Control variable



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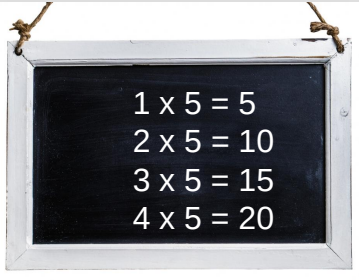
Loop counter



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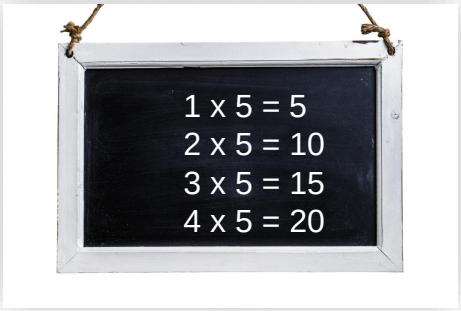

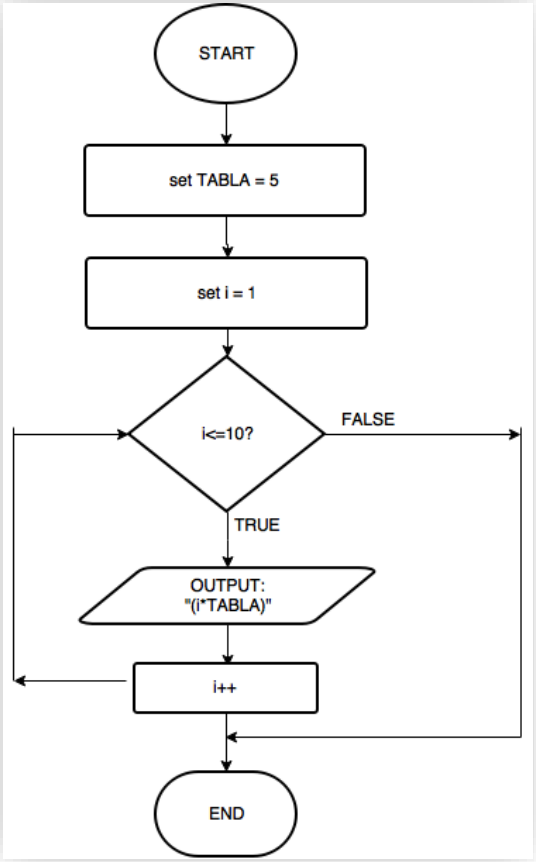

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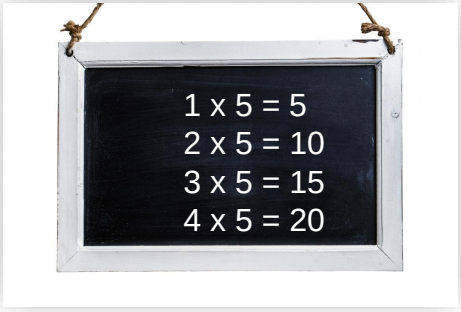

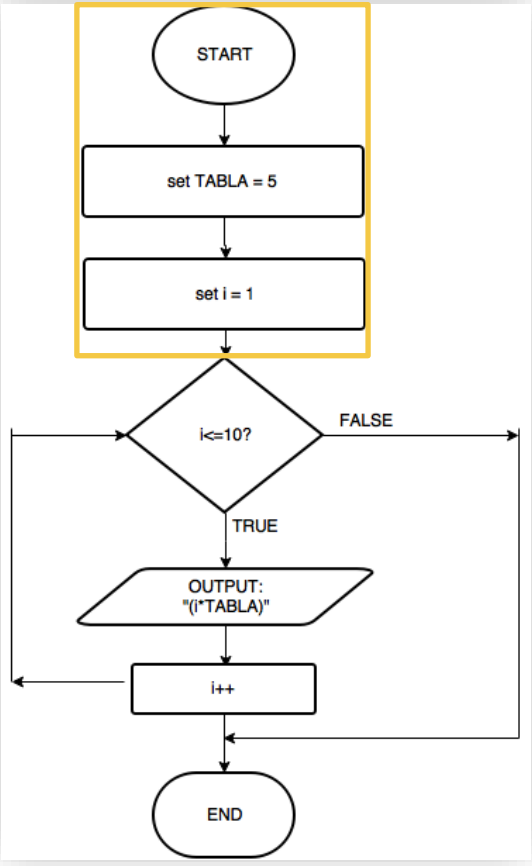

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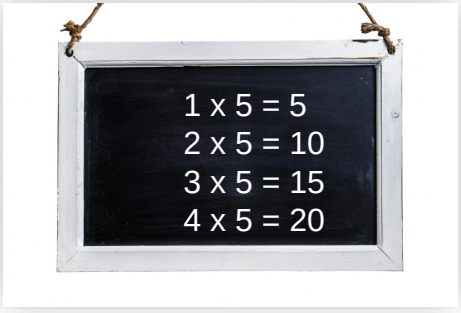

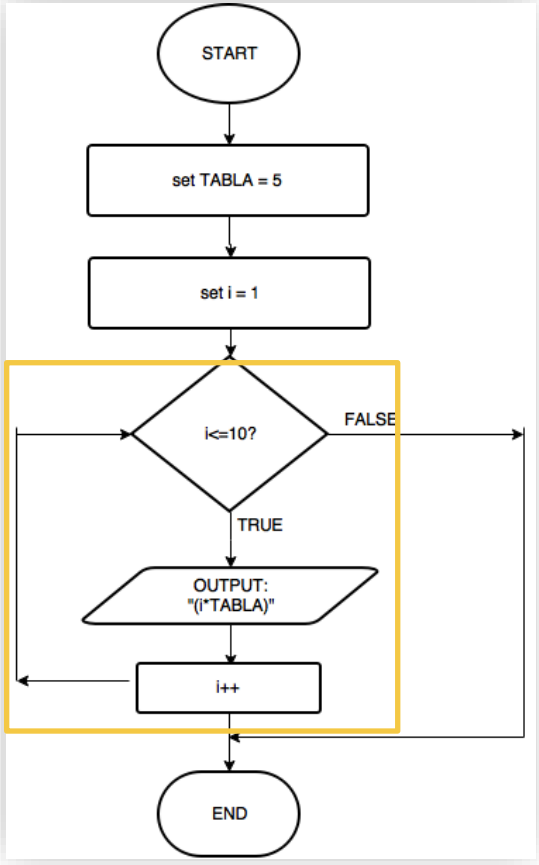

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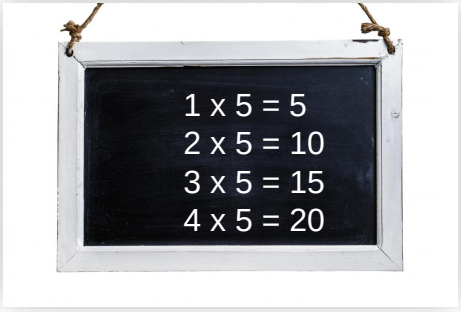
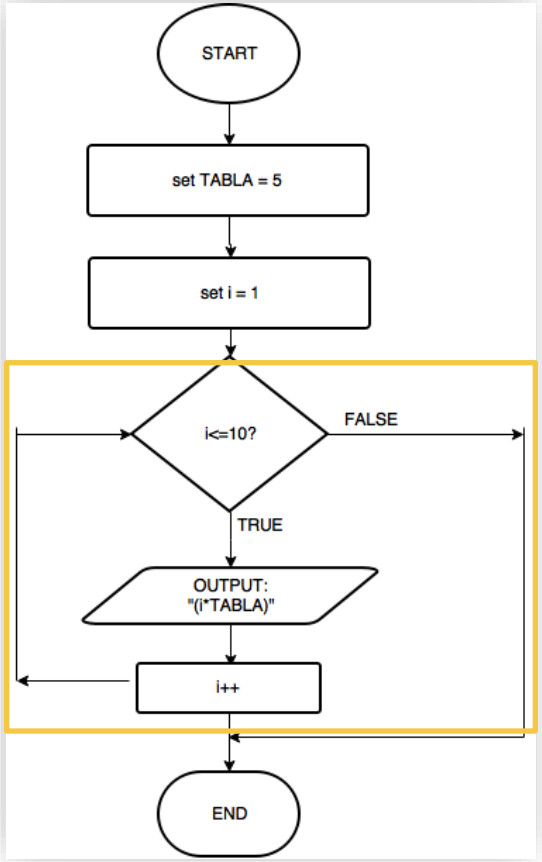
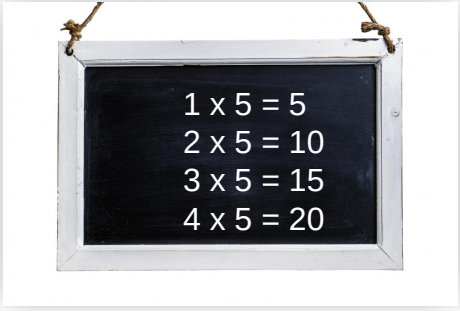
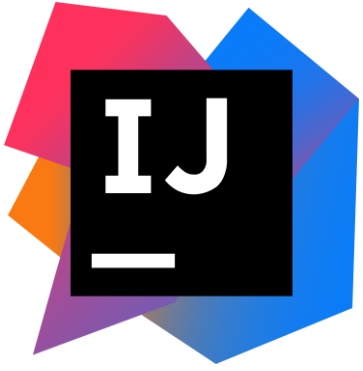




Debugging WHILE loop

3. Debugging WHILE loop





“Lo importante es no dejar de hacerse preguntas“

Albert Einstein