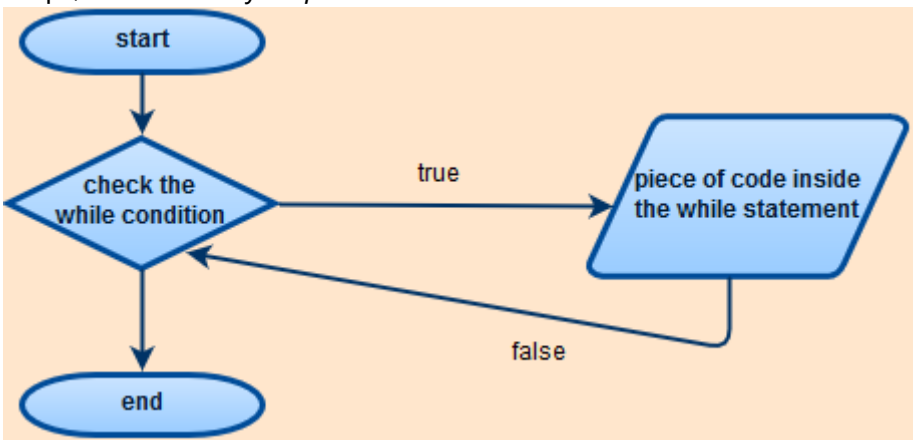
While statement - theory

The while statement is *drum roll* another flow control, it repeats a piece of code as long as a condition is satisfied. The while statement and the for statement (we'll see this soon) are also called loops, because they *loop* code. His flow chart would look like this



You must be careful with the while statement, because you could create an endless loop.

While statement - practice

The while syntax as you could have guessed is

```
while (condition){
        code to execute
}
```

If the condition always returns true your program will crash, so don't do things like this

```
int x=10;
while (x>0){
        Console.WriteLine("Ehi!");
}
```

And for the while statements it's all, enjoy!

While statement - assignment

Code a program that given a number as input prints all the numbers from 0 to that number.

TIPS:

- To convert a string into an integer you can use the Int32.Parse(value) method, the input must be a string and the output will be an integer
- Similarly to convert an integer into a string: integer.ToString() where integer is your int variable

BONUS POINT:

- Check if the input is negative and if so respond with an error

SOLUTION:

```
Console.WriteLine("Write the number here: "); //ask the user for the number
string userinput= Console.ReadLine(); //read what the user wrote
```

```
int number= Int32.Parse(userinput); //converts the user input to integer
int x=0; //sets the x to 0
if (number>=0){ //makes sure that the number is greater than 0
        while (x<=number){
                Console.WriteLine(x.ToString()); //prints x
                x++; //adds 1 to x
        }
} else{
        Console.WriteLine("Error: number smaller than 0"); //prints the error
}
Console.ReadLine(); //we use this command to prevent the windows from closing
```