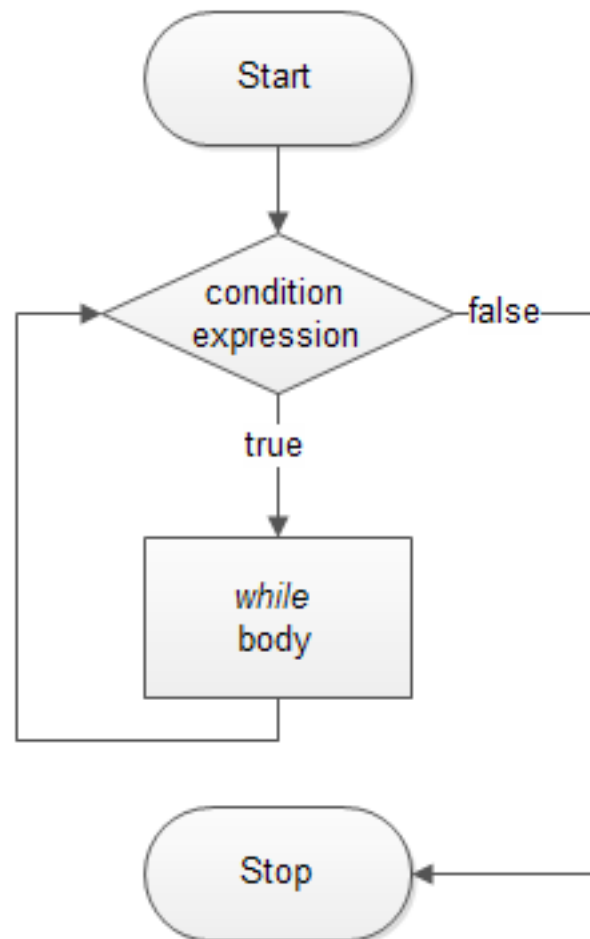## What is a while loop?

A while loop is a statement that allows a certain piece of code executed repeatedly over and over again based on a given boolean condition. It is very similar to an if statement, except it runs that piece of code until the condition becomes false.

What is an infinite loop?

An infinite loop is when a while loop runs forever because the condition never becomes false. And thus, the loop never stops running. An example of this is when we say while(true) or while(1==1). Both of these statements are true and cannot be false no matter what.

How is iteration done in a while loop?

An iteration is done the exact same way we do in for loops. For ex: +=5, ++, —, etc. However the way you know when to end the iteration must be in the condition. A good example would be as follows:

```
int i =0;
while(i<10)
{
   i+=2;
   System.out.print(i);
}
```

In this example, i starts from 0, and stops when i is not smaller than 10. I increases by 2 every time we run it. So the result for this piece of code would be 246810.