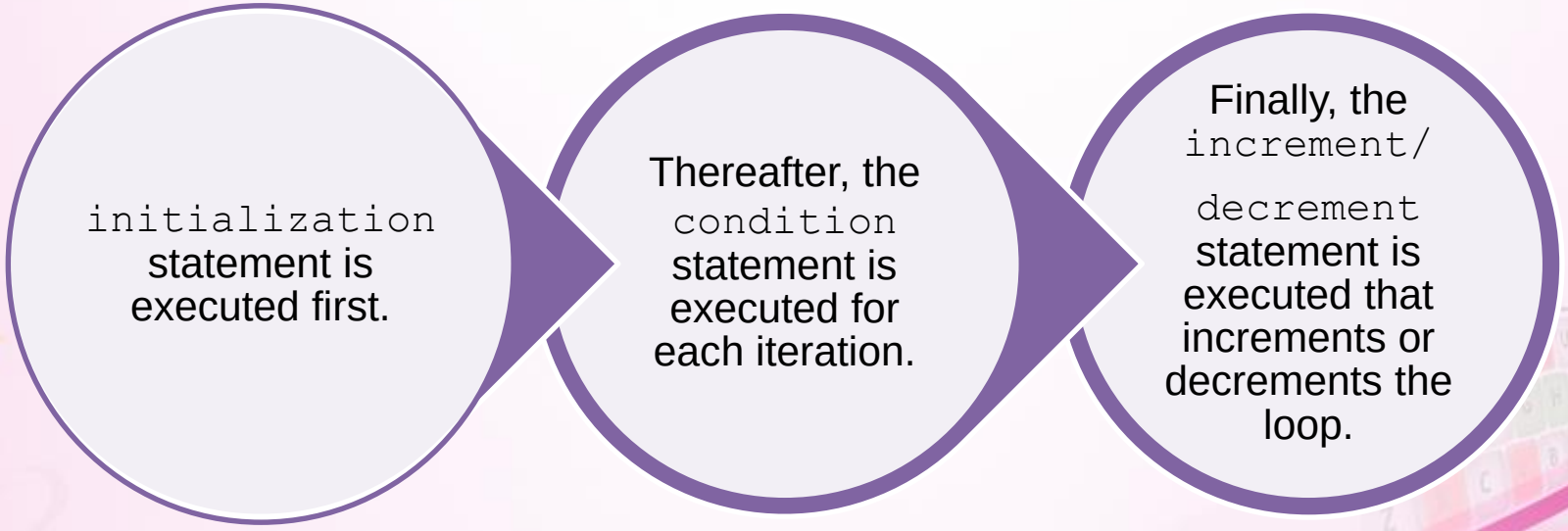
Working with Loop Constructs

- A looping statement enables you to execute the same statements for a certain number of times.
- You can enclose the statements within the loop construct and the loop construct executes the statements till the specified condition is met.
- Java supports the following loop constructs:
  - The `for` loop
  - The `while` loop
  - The `do…while` loop

Using the for Construct

- The syntax for the `for` loop construct is:

```
for(initialization; condition; increment/decrement)
{
    //statement(s)
}
```



Using the for Construct (Contd.)

- You can create an infinite loop by keeping all the three statements blank, as shown in the following code snippet:

```
for ( ; ; )
{
        //statement(s)
}
```

- Java provides:
  - The `break` statement that stops the execution of the remaining statements within the body of the loop.
  - The `continue` statement that skips all the statements following the `continue` statement and moves the control back to the loop statement.

Using the for Construct (Contd.)

- The following code snippet depicts the use of the `break` statement within the `for` loop:

```
for(count=0;count<10;count++)
{
  if(count==7)
  {
  break;
  }
  System.out.println(count);
}
```

Using the for Construct (Contd.)

- The following code snippet depicts the use of the `continue` statement within the `for` loop:

```
for(count=0;count<10;count++)
{
  if(count==3)
  {
  continue;
  }
  System.out.println(count);
}
```