**DIFFERENCE BETWEEN FOR LOOP AND WHILE LOOP**

The increment occurs only after the execution of the statement(s). We can perform the increment both- after or before the execution of the given statement(s). **We use the for loop when the increment and initialization are very simple.** **We use the while loop in the case of a complex initialization**.

|  |  |
| --- | --- |
| **FOR LOOP** | **WHILE LOOP** |
| **public** **class** loop\_Concept  {  **public** **static** **void** main(String[] args)  {  **int** i;  **for**(i=1;i<4;i++)  {  System.***out***.println(i);  }  }  }  **OUTPUT**  1  2  3 | Public class loop\_Concept  {  **public** **static** **void** main(String[] args)  {  **int** i=1;  **while**(i<4)  {  System.***out***.println(i);  i++;  }  }  }  **OUTPUT**  1  2  3 |

|  |  |
| --- | --- |
| **FOR LOOP** | **WHILE LOOP** |
| It is used when the number of iterations is known. | It is used when the number of iterations is not known. |
| In case of no condition, the loop is repeated infinite times. | In case of no condition, an error will be shown. |
| Initialization is not repeated. | Initialization is repeated if carried out during the stage of checking. |
| Statement of Iteration is written after running. | It can be written at any place. |
| Initialization can be in or out of the loop | Initialization is always out of the loop. |
| The nature of the increment is simple. | The nature of the increment is complex. |
| Used when initialization is simple. | Used when initialization is complex. |