Loops.

Definitions:-

For Loop: A control flow statement that allows code to be executed repeatedly based on a given boolean condition.

Syntax: for (initialization; condition: increment | decrement)₹

```
// code block to be executed.
}
```

While Loop: A control flow Statement that allows code to be executed repeatedly based on a boolean condition.

Syntax:- while (condition) {

```
// code block to be executed
}
```

Do-while Loop: Similar to the while loop, but it ensures that code block is executed at least once before the condition is tested. _

Syntax:
```
do {
    // code block to be executed.
}
while (condition);
```

Algorithm:-

1. Initialize the Scanner: Create a Scanner object to read input from the user.

For Loop: (Commented)

1. Initialize a Variable num to 1.

2. check if num is less than or equal to 5.

3. Print num and increment it by 1 in each iteration.

while Loop:-

1. Initialize the Variables

2. Prompt the user to enter value of n.

3. Read the Value of n.

4. while i is less than or equal to n, print i and increment it by 1.

Do-While Loop:

1. Initialize the Variables.

2. Prompt the user to enter the Value.

3. Read the Value of n from the user.

4. Use a do-while to print j and increment it by 1 as long as j is less than or equal to n.