Todays Topic

- Nested loops

Nested loops

If a loop is used within another loop then such a control structure is called as nested loop.

```
loop
{

        loop
        {
        statements..
        ………………
        }

}
```

Note: Where loop can be any loop i.e. while loop, for loop or do-while loop.

Java

```
class demo
{
public static void main(String args[])
        {
        for( int n=1 ; n<=5 ; n++ )
                {
                for( int i=1 ; i<=9 ; i++ )
                        System.out.print( i );
                System.out.println( );
                }
        }
}
```

WAP to print following Output:

123456789
123456789
123456789
123456789
123456789

```java
class demo
{
public static void main(String args[])
        {
        for( int n=1 ; n<=4 ; n++ )
                {
                for( int i=9 ; i>=0 ; i-- )
                        System.out.print( i );
                System.out.println( );
                }
        }
}
```

WAP to print following Output:

9876543210

9876543210

9876543210

9876543210

Java

```
class demo
{
public static void main(String args[])
        {
        for( int n=1 ; n<=4 ; n++ )
                {
                for( int i=1 ; i<=9 ; i++ )
                        System.out.print( i );
                for( int i=9 ; i>=1; i-- )
                        System.out.print( i );
                System.out.println( );
                }
        }
}
```

WAP to print following Output:

```
123456789987654321
123456789987654321
123456789987654321
123456789987654321
```

```
class demo
{
public static void main(String args[])
        {
        for( int n=1 ; n<=3 ; n++ )
                {
                for( int i=9 ; i>=0 ; i-- )
                        System.out.print( i );
                for( int i=1 ; i<=9; i++ )
                        System.out.print( i );
                System.out.println( );
                }
        }
}
```

WAP to print following Output:

9876543210123456789

9876543210123456789

9876543210123456789

```
class demo
{
public static void main(String args[])
        {
        for( int n=1 ; n<=3 ; n++ )
                {
                for( int a=1 ; a<=4 ; a++)
                        for( int i=1 ; i<=9 ; i++ )
                                System.out.print( i );
                System.out.println( );
                }
        }
}
```

WAP to print following Output:

123456789123456789123456789123456789
123456789123456789123456789123456789
123456789123456789123456789123456789