//syntax of a Java for loop

int fibon = 0;

int fibold = 0, fibnew = 1;

System.out.print(fibold + " ");

System.out.print(fibnew + " ");

for (int index = 0; index < 10; index++)

{

//Fibonacci Numbers

fibon = fibold + fibnew;

System.out.print(fibon + " ");

//update the variables

fibold = fibnew;

fibnew = fibon;

}

//0, 1, 1, 2, 3, 5, 8, 13, 21, 34, ...

fibold = 0

fibnew = 1

fibon = 0 + 1 = 1

fibold = 1

fibnew = 1

fibon = 1 + 1 = 2

fibold = 1

fibnew = 2

fibon = 1 + 2 = 3

fibold = 2

fibnew = 3

fibon = 2 + 3 = 5