

```
int mLengthOfQueue; // M + 1
int mLengthOfWindow; // N + 1
int mLengthOfRecord; // h, = 6 in this case
int mWindowStart; //
int mWindowEnd; //
public void wrapWindowToStart(); // takes last N+1 columns and deep copy to first N+1 columns
```

wrapWindowToStart copies this to window0

<i>Accelerometer.x</i>	$X_{0,0}$	$X_{0,1}$	$X_{0,2}$		$X_{0,k}$	$X_{0,k+1}$		$X_{0,M-N}$		$X_{0,M}$
<i>Accelerometer.y</i>	$X_{1,0}$	$X_{1,1}$	$X_{1,2}$		$X_{1,k}$	$X_{1,k+1}$		$X_{1,M-N}$		$X_{1,M}$
<i>Accelerometer.z</i>	$X_{2,0}$	$X_{2,1}$	$X_{2,2}$		$X_{2,k}$	$X_{2,k+1}$		$X_{2,M-N}$		$X_{2,M}$
<i>Gyro.x</i>	$X_{3,0}$	$X_{3,1}$	$X_{3,2}$...	$X_{3,k}$	$X_{3,k+1}$		$X_{3,M-N}$...	$X_{3,M}$
<i>Gyro.y</i>	$X_{4,0}$	$X_{4,1}$	$X_{4,2}$		$X_{4,k}$	$X_{4,k+1}$		$X_{4,M-N}$		$X_{4,M}$
<i>Gyro.z</i>	$X_{5,0}$	$X_{5,1}$	$X_{5,2}$		$X_{5,k}$	$X_{5,k+1}$		$X_{5,M-N}$		$X_{5,M}$

| - window1 - |

$w_{0,0}$	$w_{0,1}$	$w_{0,2}$	$w_{0,k}$	$w_{0,k+1}$	$w_{0,M-N}$	$w_{0,M}$
$w_{1,0}$	$w_{1,1}$	$w_{1,2}$	$w_{1,k}$	$w_{1,k+1}$	$w_{1,M-N}$	$w_{1,M}$
$w_{2,0}$	$w_{2,1}$	$w_{2,2}$	$w_{2,k}$	$w_{2,k+1}$	$w_{2,M-N}$	$w_{2,M}$
$w_{3,0}$	$w_{3,1}$	$w_{3,2}$	$w_{3,k}$	$w_{3,k+1}$	$w_{3,M-N}$	$w_{3,M}$
$w_{4,0}$	$w_{4,1}$	$w_{4,2}$	$w_{4,k}$	$w_{4,k+1}$	$w_{4,M-N}$	$w_{4,M}$
$w_{5,0}$	$w_{5,1}$	$w_{5,2}$	$w_{5,k}$	$w_{5,k+1}$	$w_{5,M-N}$	$w_{5,M}$

$$\begin{array}{ccccccc} a_{0,0} & a_{0,1} & a_{0,2} & & & a_{0,k} \\ a_{1,0} & a_{1,1} & a_{1,2} & & & a_{1,k} \\ a_{2,0} & a_{2,1} & a_{2,2} & & & a_{2,k} \\ a_{3,0} & a_{3,1} & a_{3,2} & \dots & & a_{3,k} \\ a_{4,0} & a_{4,1} & a_{4,2} & & & a_{4,k} \\ a_{5,0} & a_{5,1} & a_{5,2} & & & a_{5,k} \end{array}$$
$$\begin{array}{ccccccc}
X_{0,0} & X_{0,1} & X_{0,2} & X_{0,k} & X_{0,k+1} & X_{0,M-N} & X_{0,M} \\
X_{1,0} & X_{1,1} & X_{1,2} & X_{1,k} & X_{1,k+1} & X_{1,M-N} & X_{1,M} \\
X_{2,0} & X_{2,1} & X_{2,2} & X_{2,k} & X_{2,k+1} & X_{2,M-N} & X_{2,M} \\
X_{3,0} & X_{3,1} & X_{3,2} & X_{3,k} & X_{3,k+1} & X_{3,M-N} & X_{3,M} \\
X_{4,0} & X_{4,1} & X_{4,2} & X_{4,k} & X_{4,k+1} & X_{4,M-N} & X_{4,M} \\
X_{5,0} & X_{5,1} & X_{5,2} & X_{5,k} & X_{5,k+1} & X_{5,M-N} & X_{5,M}
\end{array}$$

ISDFT (filter * SDFT)