



```
1  // #include <fastmath67x.h>
2  #include <math.h>
3  void main()
4  {
5      int *Xn, *Hn, *Output;
6      int *XnLength, *HnLength;
7      int i, k, n, l, m;
8      Xn = (int *)0x80010000; // input x(n)
9      Hn = (int *)0x80011000; // input h(n)
10     XnLength = (int *)0x80012000; // x(n) length
11     HnLength = (int *)0x80012004; // h(n) length
12     Output = (int *)0x80013000; // output address
13     l = *XnLength; // copy x(n) from memory address to variable l
14     m = *HnLength; // copy h(n) from memory address to variable m
15     for(i=0; i<(l+m-1); i++) // memory clear
16     {
17         Output[i] = 0; // o/p array
18         Xn[l+i] = 0; // i/p array
19         Hn[m+i] = 0; // i/p array
20     }
```

```
21  for(n=0;n<(l+m-1);n++)
22  {
23  for(k=0;k<=n;k++)
24  {
25  Output[n] =Output[n] + (Xn[k]*Hn[n-k]); // convolution
      operation.
26  }
27  }
28  }
```