

```

void top(...) {
    ...
    for_mult:for (i=3;i>=0;i--) {
        a[i] = b[i] * c[i];
    }
    ...
}

```

### Rolled Loop

Read b[3]	Read b[2]	Read b[1]	Read b[0]
Read c[3]	Read c[2]	Read c[1]	Read c[0]
*	*	*	*
Write a[3]	Write a[2]	Write a[1]	Write a[0]

### Partially unrolled Loop

Read b[3]	Read b[1]
Read c[3]	Read c[1]
Read b[2]	Read b[0]
Read c[2]	Read c[0]
*	*
*	*
Write a[3]	Write a[1]
Write a[2]	Write a[0]

### Unrolled Loop

Read b[3]
Read c[3]
Read b[2]
Read c[2]
Read b[1]
Read c[1]
Read b[0]
Read c[0]
*
*
*
*
Write a[3]
Write a[2]
Write a[1]
Write a[0]