

```
int atomicMax(int* address, int val);  
unsigned int atomicMax(unsigned int* address,  
                        unsigned int val);
```

reads the 32-bit word **old** located at the address **address** in global or shared memory, computes the maximum of **old** and **val**, and stores the result back to memory at the same address. These three operations are performed in one atomic transaction. The function returns **old**.