

Next Power of Two

Write a C function that has a long integer parameter and returns the smallest power of two that is greater than or equal to the parameter. The function should also return a long integer. Call your function from a main program that looks like this:

```
#define MAXSHOW 25

unsigned long nextpower2(unsigned long n);

int main(int argc, char *argv[])
{
    int i, reps;
    long m, n,

    srand48(2);           // everyone uses the same seed

    reps = (argc > 1) ? atol(argv[1]) : 10;
    for(i = 0 ; i < reps ; i++){
        n = lrand48() >> 1;
        m = nextpower2(n);
        if(reps <= MAXSHOW)
            printf("%20ld %20ld\n", n, m);
    }
}
```

Create a subdirectory of your home directory named `aug26`, and place your solution there in a file named `program01.c`. Your solution is due Monday August 26, at 3:00PM. No credit will be given for late assignments, assignments with the wrong filename, or assignments with the wrong format.