```c
#include <stdio.h>
#include <math.h>

/* User-defined complex number type */

typedef struct {

    double real, imag;

}complex_t;

extern int scan_complex(complex_t *c);
extern void print_complex(complex_t c);
extern complex_t add_complex(complex_t c1, complex_t c2);
extern complex_t subtract_complex(complex_t c1, complex_t c2);
extern complex_t multiply_complex(complex_t c1, complex_t c2);
extern complex_t divide_complex(complex_t c1, complex_t c2);
extern complex_t abs_complex(complex_t c);
```