```
/* HW09 HASAN MEN 131044009 complex.h */
1
2
    /* part \overline{2} */
3
    typedef struct{
         double real, imag;
 5
 6
    }complex_t;
 7
8
    int
    scan_complex(complex_t *c); /* output - address of complex
9
10
    variable to fill */
11
12
    * Complex output function displays value as a + bi or a - bi.
13
    * Displays only a if imaginary part is 0.
14
    * Displays only bi if real part is 0.
15
    */
16
17
    void
    print complex(complex t c); /* input - complex number to
18
19
    display */
20
21
    * Returns sum of complex values c1 and c2
22
    */
23
24
    complex t
    add complex(complex t c1, complex t c2); /* input */
25
26
27
    * Returns difference c1 - c2
28
    */
29
30
    complex_t
31
    subtract_complex(complex_t c1, complex_t c2); /* input */
32
33
    * Returns product of complex values c1 and c2
34
    */
35
    complex t
36
    multiply_complex(complex_t c1, complex_t c2); /* input */
37
38
39
    * Returns quotient of complex values (c1 / c2)
40
    */
41
42
    complex_t
    divide complex(complex t c1, complex t c2); /* input */
43
44
45
    * Returns absolute value of complex number c
46
    */
47
48
    complex t
    abs complex(complex t c); /* input */
49
```