

Run Terminal Window Help

main.c

RER  
EDITORS  
C main.c  
N.C  
vscode  
main.dSYM  
#include <stdio.c  
a.out  
C hello.c  
≡ main  
C main.c  
≡ tempCodeRunnerFile  
≡ Untitled-1

C main.c M X

```
C main.c > addComplex(Complex, Complex)
3 struct Complex {
4     float real;
5     float imag;
6 }
7
8 struct Complex readComplex() {
9     struct Complex c;
10    printf("Enter real part: ");
11    scanf("%f", &c.real);
12    printf("Enter imaginary part: ");
13    scanf("%f", &c.imag);
14    return c;
15 }
16
17 void writeComplex(struct Complex c) {
18     if (c.imag >= 0)
19         printf("%.2f + %.2fi\n", c.real, c.imag);
20     else
21         printf("%.2f - %.2fi\n", c.real, -c.imag);
22 }
23 struct Complex addComplex(struct Complex a, struct Complex b) {
24     struct Complex result;
25     result.real = a.real + b.real;
26     result.imag = a.imag + b.imag;
27     return result;
28 }
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

Enter real part: 5  
Enter imaginary part: 2

Enter second complex number:  
Enter real part: 3  
Enter imaginary part: 4

First Complex Number: 5.00 + 2.00i  
Second Complex Number: 3.00 + 4.00i

Sum: 8.00 + 6.00i  
Difference: 2.00 - 2.00i

abhaygupta@192 main.c %

In 29, Col 1 Spaces: 4 UTF-8 LF 0



Experiment - 7.1

7.1 #include <stdio.h>

```
struct complex {  
    float real;  
    float imag;  
};
```

```
struct complex readcomplex() {  
    struct complex c;  
    printf("Enter real part: ");  
    scanf("%f", &c.real);  
    printf("Enter imaginary part: ");  
    scanf("%f", &c.imag);  
    return c;  
}
```

```
Void writeComplex(struct complex c) {  
    if (c.imag >= 0)  
        printf("%.2f + %.2fi\n", c.real, c.imag);  
    else  
        printf("%.2f - %.2fi\n", c.real, -c.imag);  
}
```

```
struct complex addComplex(struct complex c1, struct complex c2) {  
    struct complex result;  
    result.real = c1.real + c2.real;  
    result.imag = c1.imag + c2.imag;  
    return result;  
}
```

```
struct Complex Subcomplex (struct Complex c1, struct Complex c2) {
    struct Complex result;
    result.real = c1.real - c2.real;
    result.imag = c1.imag - c2.imag;
    return result;
}
```

```
int main () {
    struct Complex num1, num2, sum, diff;
```

```
printf ("Enter first complex number: \n");
num1 = readComplex();
```

```
printf ("Enter second complex number: \n");
num2 = readComplex();
```

```
sum = addComplex (num1, num2);
diff = subComplex (num1, num2);
```

```
printf ("\nEnter first complex number: ");
writeComplex (num1);
```

```
printf ("\nEnter second complex number: ");
writeComplex (num2);
```

```
printf ("\nEnter sum: ");
writeComplex (sum);
```

```
printf ("\nEnter difference: ");
writeComplex (diff);
```

```
return 0;
```

Teacher's Signature \_\_\_\_\_