

```

#include<stdio.h>
struct complex
{
    int real, img;
};
int main()
{
    int choice;

    int a_real, b_real , a_img, b_img, c_real , c_img;
    printf("enter a and b where a+ib is first complex equation\n");
    scanf("%d%d",&a_real,&a_img);
    printf("the first complex no is %d + i%d\n",a_real,a_img);
    printf("enter c and d where c+id is first complex equation\n");
    scanf("%d%d",&b_real,&b_img);
    printf("the second complex no is %d + i%d\n",b_real,b_img);
    printf("enter your choice");
    scanf("%d",&choice);

    switch(choice)
    {
        case 1:
            c_real= a_real + b_real;
            c_img= a_img + b_img;
            printf("the sum of complex numbers is %d +
i%d\n",c_real,c_img);
            break;

        case 2:
            c_real= a_real*b_real - a_img*b_img;
            c_img= a_img*b_real - a_real*b_img;
            printf("the multiplication of complex numbers is : %d +
i%d",c_real,c_img);
            break;

    }
    return 0;
}

```

output:

```

enter a and b where a+ib is first complex equation
1

```

4

the first complex no is $1 + i4$

enter c and d where $c+id$ is first complex equation

4

3

the second complex no is $4 + i3$

enter your choice1

the sum of complex numbers is $5 + i7$

Process exited after 16.47 seconds with return value 0

Press any key to continue . . .