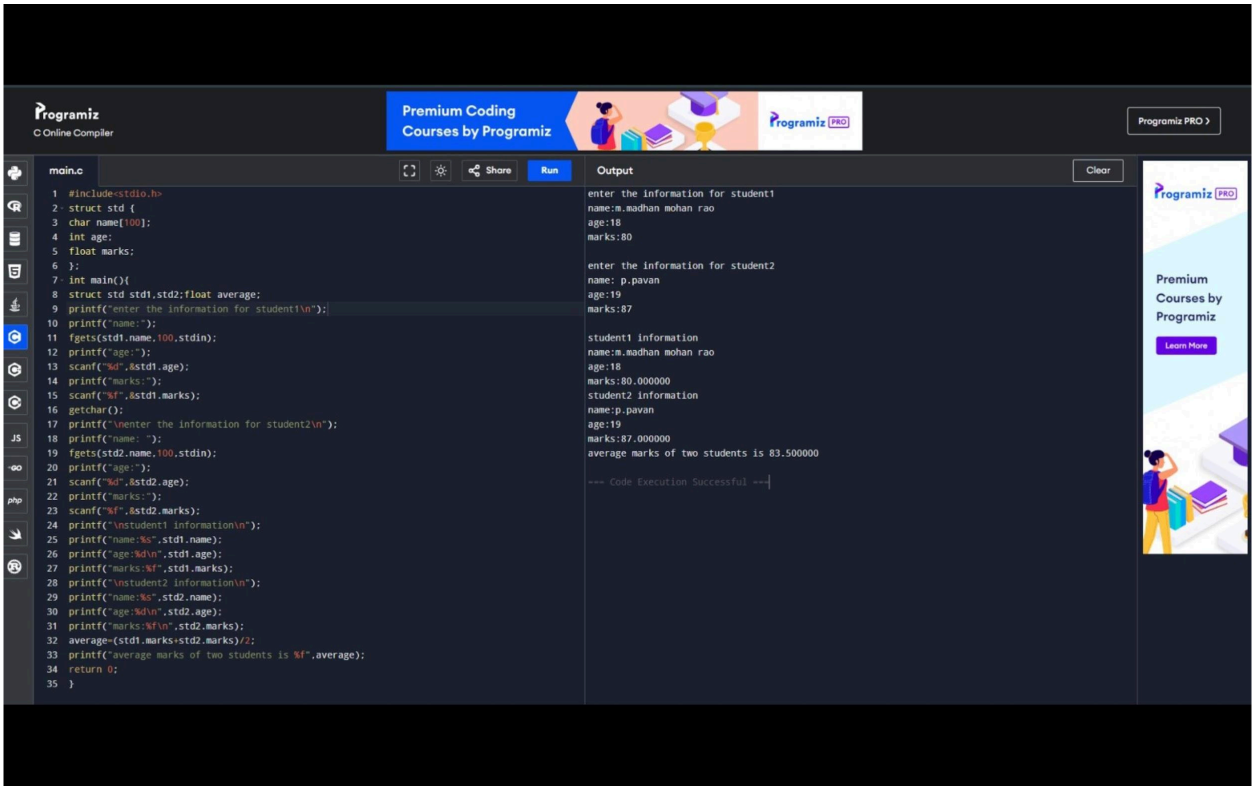
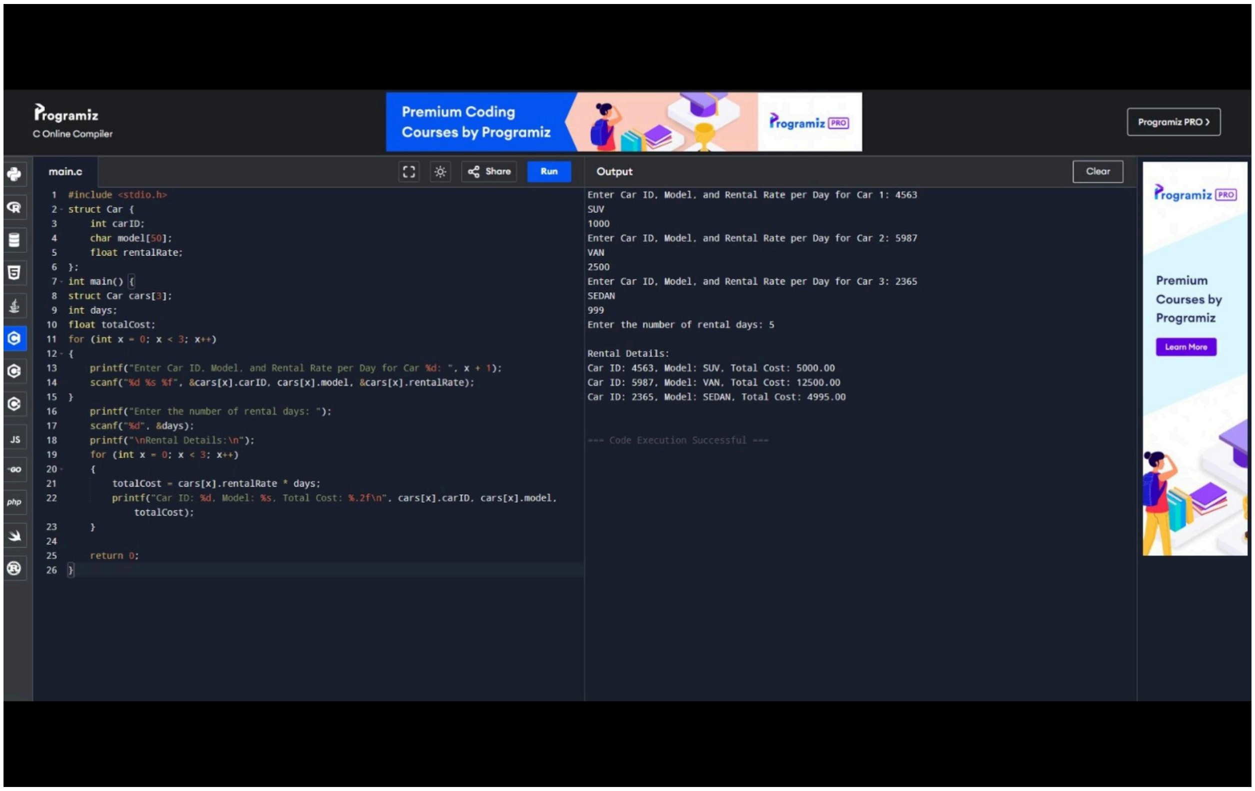


```c
#include<stdio.h>
struct std {
char name[100];
int age;
float marks;
};
int main(){
struct std std1,std2;float average;
printf("enter the information for student1\n");
printf("name:");
fgets(std1.name,100,stdin);
printf("age:");
scanf("%d",&std1.age);
printf("marks:");
scanf("%f",&std1.marks);
getchar();
printf("\nenter the information for student2\n");
printf("name: ");
fgets(std2.name,100,stdin);
printf("age:");
scanf("%d",&std2.age);
printf("marks:");
scanf("%f",&std2.marks);
printf("\nstudent1 information\n");
printf("name:%s",std1.name);
printf("age:%d\n",std1.age);
printf("marks:%f",std1.marks);
printf("\nstudent2 information\n");
printf("name:%s",std2.name);
printf("age:%d\n",std2.age);
printf("marks:%f\n",std2.marks);
average=(std1.marks+std2.marks)/2;
printf("average marks of two students is %f",average);
return 0;
}
```

```
enter the information for student1
name:m.madhan mohan rao
age:18
marks:80

enter the information for student2
name: p.pavan
age:19
marks:87

student1 information
name:m.madhan mohan rao
age:18
marks:80.000000
student2 information
name:p.pavan
age:19
marks:87.000000
average marks of two students is 83.500000

=== Code Execution Successful ===
```

1).

```c
#include<stdio.h>
struct std {
char name[100];
int age;
float marks;
};
int main(){
struct std std1,std2;float average;
printf("enter the information for student1\n");
printf("name:");
fgets(std1.name,100,stdin);
printf("age:");
scanf("%d",&std1.age);
printf("marks:");
scanf("%f",&std1.marks);
getchar();
printf("\nenter the information for student2\n");
printf("name: ");
fgets(std2.name,100,stdin);
printf("age:");
scanf("%d",&std2.age);
printf("marks:");
scanf("%f",&std2.marks);
printf("\nstudent1 information\n");
printf("name:%s",std1.name);
printf("age:%d\n",std1.age);
printf("marks:%f",std1.marks);
printf("\nstudent2 information\n");
printf("name:%s",std2.name);
printf("age:%d\n",std2.age);
printf("marks:%f\n",std2.marks);
average=(std1.marks+std2.marks)/2;
printf("average marks of two students is %f",average);
return 0;
}
```

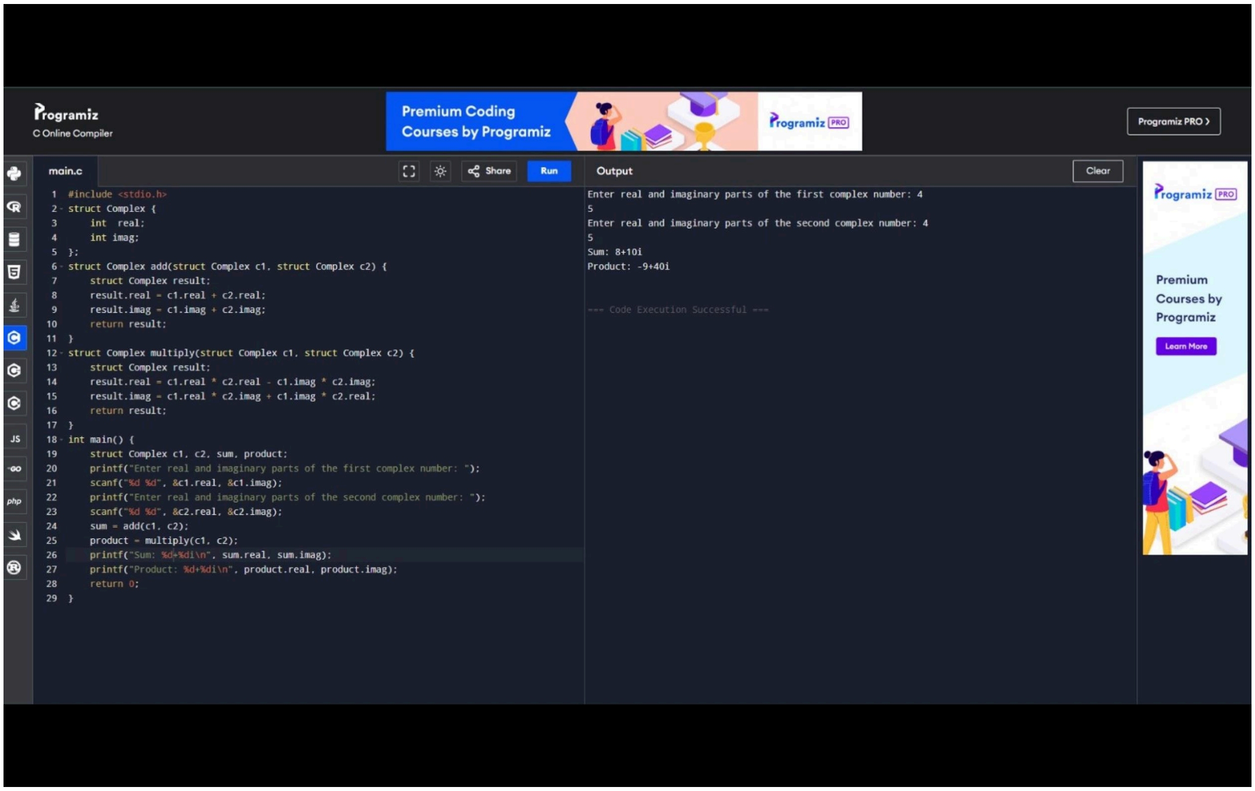


```
#include <stdio.h>
struct Car {
    int carID;
    char model[50];
    float rentalRate;
};
int main() {
struct Car cars[3];
int days;
float totalCost;
for (int x = 0; x < 3; x++)
{
    printf("Enter Car ID, Model, and Rental Rate per Day for Car %d: ", x + 1);
    scanf("%d %s %f", &cars[x].carID, cars[x].model, &cars[x].rentalRate);
}
    printf("Enter the number of rental days: ");
    scanf("%d", &days);
    printf("\nRental Details:\n");
    for (int x = 0; x < 3; x++)
    {
        totalCost = cars[x].rentalRate * days;
        printf("Car ID: %d, Model: %s, Total Cost: %.2f\n", cars[x].carID, cars[x].model,
            totalCost);
    }

    return 0;
}
```

```
Enter Car ID, Model, and Rental Rate per Day for Car 1: 4563
SUV
1000
Enter Car ID, Model, and Rental Rate per Day for Car 2: 5987
VAN
2500
Enter Car ID, Model, and Rental Rate per Day for Car 3: 2365
SEDAN
999
Enter the number of rental days: 5

Rental Details:
Car ID: 4563, Model: SUV, Total Cost: 5000.00
Car ID: 5987, Model: VAN, Total Cost: 12500.00
Car ID: 2365, Model: SEDAN, Total Cost: 4995.00


=== Code Execution Successful ===
```

2).

```
#include <stdio.h>
struct Car {
   int carID;
   char model[50];
   float rentalRate;
};
int main() {
struct Car cars[3];
int days;
float totalCost;
for (int x = 0; x < 3; x++)
{
    printf("Enter Car ID, Model, and Rental Rate per Day for Car %d: ", x + 1);
    scanf("%d %s %f", &cars[x].carID, cars[x].model, &cars[x].rentalRate);
}
    printf("Enter the number of rental days: ");
    scanf("%d", &days);
    printf("\nRental Details:\n");
    for (int x = 0; x < 3; x++)
    {
        totalCost = cars[x].rentalRate * days;
        printf("Car ID: %d, Model: %s, Total Cost: %.2f\n", cars[x].carID, cars[x].model, totalCost);
    }

    return 0;
}
```

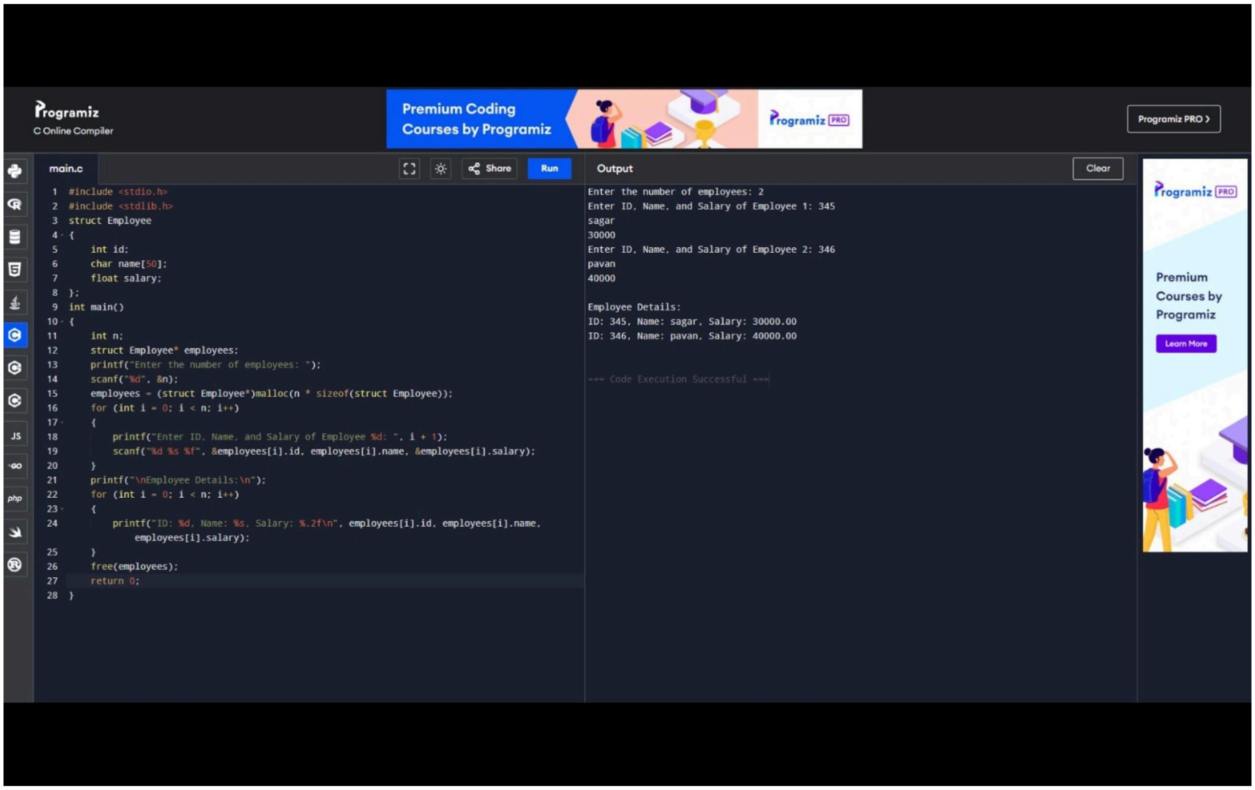


```
#include <stdio.h>
struct Complex {
    int  real;
    int imag;
};
struct Complex add(struct Complex c1, struct Complex c2) {
    struct Complex result;
    result.real = c1.real + c2.real;
    result.imag = c1.imag + c2.imag;
    return result;
}
struct Complex multiply(struct Complex c1, struct Complex c2) {
    struct Complex result;
    result.real = c1.real * c2.real - c1.imag * c2.imag;
    result.imag = c1.real * c2.imag + c1.imag * c2.real;
    return result;
}
int main() {
    struct Complex c1, c2, sum, product;
    printf("Enter real and imaginary parts of the first complex number: ");
    scanf("%d %d", &c1.real, &c1.imag);
    printf("Enter real and imaginary parts of the second complex number: ");
    scanf("%d %d", &c2.real, &c2.imag);
    sum = add(c1, c2);
    product = multiply(c1, c2);
    printf("Sum: %d+%di\n", sum.real, sum.imag);
    printf("Product: %d+%di\n", product.real, product.imag);
    return 0;
}
```

```
Enter real and imaginary parts of the first complex number: 4
5
Enter real and imaginary parts of the second complex number: 4
5
Sum: 8+10i
Product: -9+40i


=== Code Execution Successful ===
```

3).

```
#include <stdio.h>
struct Complex {
    int  real;
    int imag;
};
struct Complex add(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 multiply(struct Complex c1, struct Complex c2) {
    struct Complex result;
    result.real = c1.real * c2.real - c1.imag * c2.imag;
    result.imag = c1.real * c2.imag + c1.imag * c2.real;
    return result;
}
int main() {
    struct Complex c1, c2, sum, product;
    printf("Enter real and imaginary parts of the first complex number: ");
    scanf("%d %d", &c1.real, &c1.imag);
    printf("Enter real and imaginary parts of the second complex number: ");
    scanf("%d %d", &c2.real, &c2.imag);
    sum = add(c1, c2);
    product = multiply(c1, c2);
    printf("Sum: %d+%di\n", sum.real, sum.imag);
    printf("Product: %d+%di\n", product.real, product.imag);
    return 0;
}
```



```c
#include <stdio.h>
#include <stdlib.h>
struct Employee
{
    int id;
    char name[50];
    float salary;
};
int main()
{
    int n;
    struct Employee* employees;
    printf("Enter the number of employees: ");
    scanf("%d", &n);
    employees = (struct Employee*)malloc(n * sizeof(struct Employee));
    for (int i = 0; i < n; i++)
    {
        printf("Enter ID, Name, and Salary of Employee %d: ", i + 1);
        scanf("%d %s %f", &employees[i].id, employees[i].name, &employees[i].salary);
    }
    printf("\nEmployee Details:\n");
    for (int i = 0; i < n; i++)
    {
        printf("ID: %d, Name: %s, Salary: %.2f\n", employees[i].id, employees[i].name,
            employees[i].salary);
    }
    free(employees);
    return 0;
}
```

```
Enter the number of employees: 2
Enter ID, Name, and Salary of Employee 1: 345
sagar
30000
Enter ID, Name, and Salary of Employee 2: 346
pavan
40000

Employee Details:
ID: 345, Name: sagar, Salary: 30000.00
ID: 346, Name: pavan, Salary: 40000.00


=== Code Execution Successful ===
```

4).

```c
#include <stdio.h>
#include <stdlib.h>
struct Employee
{
   int id;
   char name[50];
   float salary;
};
int main()
{
   int n;
   struct Employee* employees;
   printf("Enter the number of employees: ");
   scanf("%d", &n);
   employees = (struct Employee*)malloc(n * sizeof(struct Employee));
   for (int i = 0; i < n; i++)
   {
      printf("Enter ID, Name, and Salary of Employee %d: ", i + 1);
      scanf("%d %s %f", &employees[i].id, employees[i].name, &employees[i].salary);
   }
   printf("\nEmployee Details:\n");
   for (int i = 0; i < n; i++)
```

```
    {
        printf("ID: %d, Name: %s, Salary: %.2f\n", employees[i].id, employees[i].name, employees[i].salary);
    }
    free(employees);
    return 0;
}
```