

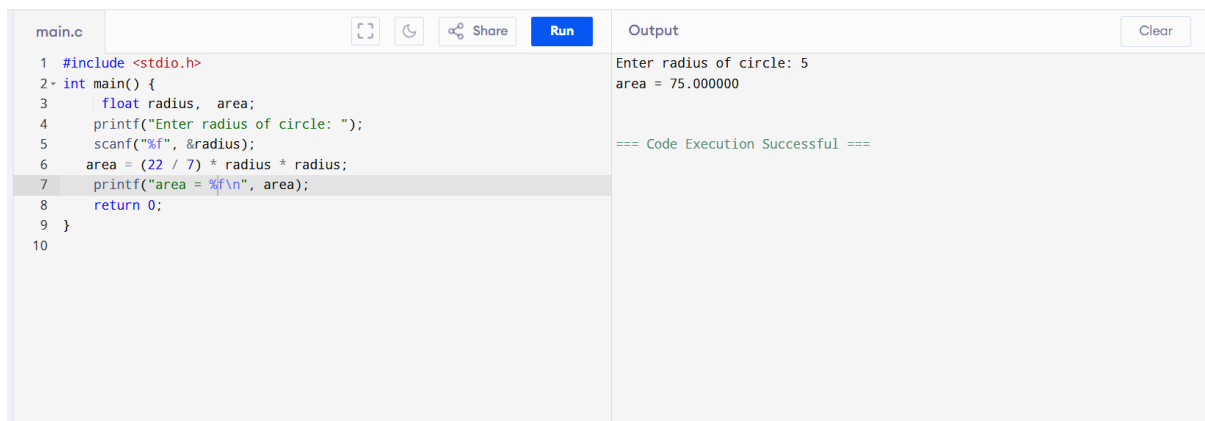
c programming assignment 1

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1 19. Area of a circle.

```
#include <stdio.h>
int main() {
    float radius, area;
    printf("Enter radius of circle: ");
    scanf("%f", &radius);
    area = (22 / 7) * radius * radius;
    printf("area = %f\n", area);
    return 0;
}
```



The screenshot shows a code editor with a file named 'main.c'. The code is a C program to calculate the area of a circle. It includes the standard input/output header, defines a main function, declares variables for radius and area, prompts the user for the radius, reads the input, calculates the area using the formula $\text{area} = \frac{22}{7} \times \text{radius} \times \text{radius}$, and prints the result. The code is as follows:

```
1 #include <stdio.h>
2 int main() {
3     float radius, area;
4     printf("Enter radius of circle: ");
5     scanf("%f", &radius);
6     area = (22 / 7) * radius * radius;
7     printf("area = %f\n", area);
8     return 0;
9 }
10
```

The output window on the right shows the program's execution. It displays the prompt 'Enter radius of circle: 5', the user input '5', and the calculated area 'area = 75.000000'. Below the output, it states '=== Code Execution Successful ==='. There are also buttons for 'Run' and 'Clear' in the interface.

Figure 1: program 19