

C programming Assignment 19

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```
#include <stdio.h>

int main() {
    float radius, area;
    float pi = 3.1416;

    printf("Enter radius of the circle: ");
    scanf("%f", &radius);

    area = pi * radius * radius;

    printf("Area of Circle = %.2f\n", area);

    return 0;
}
```

The image shows a screenshot of a C++ IDE. The left pane contains the source code for a program named 'main.cpp'. The code includes the `<stdio.h>` header, defines a `main` function, and prompts the user to enter the radius of a circle. It then calculates the area using the formula $A = \pi r^2$ and prints the result. The right pane shows the output of the program, which displays the entered radius and the calculated area. The output also includes a success message: "=== Code Execution Successful ===".

```
1 #include <stdio.h>
2
3 int main() {
4     float radius, area;
5     float pi = 3.14159;
6
7     printf("Enter radius of the circle: ");
8     scanf("%f", &radius);
9
10    area = pi * radius * radius;
11
12    printf("Area of circle = %.2f\n", area);
13
14    return 0;
15 }
```

Output

```
Enter radius of the circle: 25
Area of circle = 1963.50
=== Code Execution Successful ===
```

Figure 1: program 19