## **Assignments for typedef and Bit-Operators**

- 1. Write a function that calculates the area of a circle given its radius using the Real typedef. Print the result in main.
- 2. Write a function that takes a Color and returns a string representing the color. Print the color in main based on the favoriteColor value.
- 3. Write a function to initialize a Book struct with a title and publication date. Then print the details of the book in main.
- 4. Write functions to initialize and print details of an Employee and a Manager. Demonstrate the use of these functions in main.
- 5. Write a C code to check if bit2 and bit3 are both set. Print whether they are both set or not.
- 6. Define a Bit-Field Structure with fields for low, mid, and high. Set Values for these fields. Print Values of low, mid, and high. Combine Fields into a single unsigned int and print its hexadecimal representation.
- 7. Write a C program to perform bitwise left and right shift operations.
- 8. In embedded systems, you often need to control specific bits in a hardware register to enable or disable features. Write a C program to use bitwise operators to set, clear, and toggle flags in a register.
- 9. Write A C program to show bit masking and modify specific bits within a variable. Demonstrates how to use bitwise operators with masks.