Assignment I (BCA: Programming in C)

1. What is data type? Why do we need it in programming? Explain any three basic data types with example.
2. What do you mean by unformatted I/O? Explain
3. Write short notes:
   a. Operator precedence and associativity
   b. History of C
   c. Bitwise Operator
   d. Local, Global, and Static variables
   e. Conditional Operator
   f. Pseudocode
   g. Ternary/ conditional(:?) Operator
   h. Comma operator
4. What are preprocessor directives? Discuss #define directive with example.
5. Discuss structure of a C Program with suitable example.
6. What is type conversion? Discuss type casting with suitable example.
7. Discuss increment and decrement operators with example.
8. What is algorithm? How is it different from flow chart?
9. What is variable? How is it different from constant? How do you write comments in C?
10. Explain formatted I/O functions in detail.
11. Differentiate between constant and literals. Why do we need to define the type of data?
12. How do you swap the values of two integers without using the third temporary variable? Justify with the example.
13. List different types of operators and explain any three of them.
14. WAP that will convert temperature in centigrade into Fahrenheit.
15. WAP to display your name.
16. WAP to calculate area and circumference of circle having the radius r should be taken from user.
17. WAP to find the reverse of a given (3 digit) number.
18. WAP in C to take two numbers as input from the user and perform basic arithmetic operations such as addition, subtraction, multiplication, division, and modulus