Computer Architecture(Lab Questions)

- 1) Write a program in C to implement Different bit wise of operators like Bitwise AND, OR, XOR, NOT, Left shift, Right shift)
- 2) Implement a program that converts a decimal number to binary, octal and hexadecimal using C programming language.
- 3) Implement a program that converts a binary number to decimal, octal and hexadecimal using C programming language.
- 4) Implement a program that converts an octal number to decimal, binary and hexadecimal using C programming language.
- 5) Implement a program that converts a hexadecimal number to decimal, binary and octal using C programming language.
- 6) Implement a program that performs addition and subtraction of binary numbers. Your program should be able to handle inputs of any length and should detect and handle overflow/underflow conditions.
- 7) Implement a program that simulates the behavior of a register transfer operation. The program should take a source register, a destination registers, and a control signal as input and transfer the content of the source register to the destination register if the control signal is 1.
- 8) write a program that takes a binary value as input and converts it into gray code and vice versa.