

List of Programs

(Computer Organization & Architecture) UCT 302

1. Write a program in ARM assembly language to add and subtract two 32-bit numbers using:
 - i) Direct addressing mode
 - ii) Indirect addressing mode
 - iii) Barrel shifter
2. Write a program to perform left and right shift of a number.
3. Write a program to find whether number is even or odd.
4. Write a program to perform Multiplication using addition.
5. Write a program to store Multiplication table of a number.
6. Write a program to perform Division using subtraction.
7. Write a program in ARM assembly language to find One's complement of a number.
8. Write a program in ARM assembly language to find Two's complement of a number.
9. Write a program in ARM assembly language to find greater of two numbers.
10. Write a program to find the factorial of a number.
11. Write a program in ARM assembly language to count the number of 1s and 0s in a given byte and verify the result.
12. Write a program to find the largest number in an array.
13. Write a program to copy an array.
14. Write a program to count the number of characters in a given string.
15. Write a program to find the number of occurrences of a particular character in a string.
16. Write a program in ARM assembly language to implement the following equation:
 - i) ax^2+by^2
 - ii) $6(x+y) + 2z+4$
17. Write a program in ARM assembly language to verify how many bytes are present in a given set which resemble 0xAC.
18. Write a program to perform addition of two 64-bit numbers.
19. Write a program to add two integer strings.