1. Write a C program that takes two integers as inputs and adds them.
2. Write a C program that takes two integers as inputs and fids their average.
3. Write a C program that calculates the area of a triangle taking base and height as inputs.
4. Write a C program that calculates the area of a square taking length of side as input.
5. Write a C program that calculates the area of a circle taking its radius as input.
6. Write a C program that calculates the perimeter of a circle taking its radius as input.
7. Write a C program that can calculate your semester’s GPA.
8. Write a C program that converts the input value of TAKA to dollar.
9. Write a C program to convert feet to meter.
10. Write a C program to convert degree Celsius to Fahrenheit.
11. Write a C code that swaps two input value (using temporary variable, not using temporary variables, using XOR operator).
12. Write a C program to find out the square root of in input number.
13. Write a C program to find out how many digits a number has.
14. Write a C program to find out how many characters a string has.
15. Write a C program to calculate an, where both ‘a’ and ‘n’ are inputs.
16. Write a C program to find out the sin(?) for a given angle in radian.
17. W rite a C program to find out the sin(?) for a given angle in degree.
18. White a C program that takes a character as input, then converts its case to opposite
19. White a C program that finds out which one of two inputs is bigger than the other.
20. Write a C program that compares 3 input integers.
21. Write a C program that takes a number as input and find out if the number is positive, negative, or otherwise.
22. Write a program to find out the letter grade of an input mark. [100 – 80 = ‘A+’, 75 – 79 = ‘A’, 70 – 74 = A-, 65 – 69 = B+, 60 – 64 = B, 55 -59 = B-, 50 – 54 = C+, 45 – 49 = C, 40 – 44 = D, 0 – 39 = F]
23. Write a program that classify an age in the following categories: 0 – 12 = kid, 13 – 19 = Teenager, 20 – 45 = Adult, 46 – 60 = Middle age, 60+ = old
24. Write a C program to find out whether an input number is odd or even.
25. Write a C program to find out if a number is a multiple of 5 or not.
26. Write a C program to print all the odd numbers between 1 to 100.
27. Write a C program to print all the even numbers between 1 to 100.
28. Write a C program to add and print all the numbers between 1 to 100.
29. Write a C program to add the following series:  
    1 + 2+ 4 + 8 + 16 + 32 + 64 + … = ?
30. Print the following patterns when line number is equal to the inputs.

|  |  |  |  |
| --- | --- | --- | --- |
| (a)  \* \* \* \* \*  \* \* \* \* \*  \* \* \* \* \*  \* \* \* \* \*  \* \* \* \* \* | (b) \*  \* \*  \* \* \*  \* \* \* \*  \* \* \* \* \* | (c)  \*  \* \*  \* \* \*  \* \* \* \*  \* \* \* \* \* | (d)  \*  \* \* \*  \* \* \* \* \*  \* \* \* \* \* \* \*  \* \* \* \* \* \* \* \* \* |
| (e) 1 2 3 4 5  1 2 3 4 5  1 2 3 4 5  1 2 3 4 5  1 2 3 4 5 | (f) 1  1 2  1 2 3  1 2 3 4  1 2 3 4 5 | (g)  1  2 1 2  3 2 1 2 3  4 3 2 1 2 3 4  5 4 3 2 1 2 3 4 5 | (h)  1  2 1 2  3 2 1 2 3  4 3 2 1 2 3 4  5 4 3 2 1 2 3 4 5  4 3 2 1 2 3 4  3 2 1 2 3  2 1 2  1 |

1. Write a C code that takes a number as input then find out it’s factorial.
2. Write a C code that takes 2 values as input the find out the GCD and LCS of the numbers.
3. Write a C program to find out if a number is prime or nonprime.
4. Write a C program to convert a decimal number into binary.
5. Write a C program to convert an input binary number to decimal.
6. Write a C code to find out if a word is palindrome or not.
7. Write a C code to count the number of words in a line.
8. Write a C code that takes n numbers as inputs and prints the in reverse order.
9. Write a C code that takes n numbers as inputs then sort them.
10. Write a C code to implement a queue.
11. Write a C code that implement a stack.