**I wish you all the very best of luck for your final exam.**

1. Write a program to calculate power of 8 for any given number. For Ex: if the input is 2, then the function should calculate 2 power 8 = 256 and print.
2. Write a program which calculate profit on items (Laptop, Mobile and Watch). The profit for any given value is 20%.
3. Write a program which takes input mid1 and mid2 score for 5 students and calculates Min, Max and average.
4. Write a function which takes three numbers and tells user to which one highest and lowest.
5. Write a function which generates right angle triangle of 10 rows.
6. Asad wants to calculate profit on all his five of his shops. The profit margin is 25% on given value. Write a program using functions which passes shops values as arguments and calculate profit for all separately and also calculates total profit.
7. Write a recursive function that calculates product of a series as given below: x \* x/2 \* (x/2/2) \* ….. \* 1
8. Create a structure to specify data on students given below: Roll#, Name, Department, Course, Year of Joining
   1. Write a function to print the names of all students who joined in a particular year.
   2. Write a function to print the data of a student whose roll number is given.
9. Define a structure having name of the triangle, base, perpendicular, hypotenuse and angle.
   1. Create a right angle triangle variable.
10. Define structure having Shop name, Array of Products Names, Array of Products Price.
    1. Create two functions:
    2. Search & Print Maximum price product name
    3. Takes user input and adds a new product and price
11. Develop a function and call by reference and change value of variable in main to it’s square (power 2) value.
    1. Calculate cube of an input using functions but do not initialize more than one variable throughout program.
12. Pointers:
    1. Initialize two arrays.
       1. Use pointers to square one array and store in another
       2. Use pointers to swap values of both arrays.
       3. Use pointers to perform multiplications, addition and subtraction in user defined functions.
       4. Write a C program to find reverse of a string using pointers.
       5. Write a C program to return multiple value from function using pointers.
13. Write a while loop that asks user to enter an extra user information, if it says yes then increase the size of array.
14. C program to read name and marks of n number of students and store them in a file.
15. C program to read name and marks of n number of students from a stored file and print on screen.
16. Recursion:
    1. Sum of all natural numbers between N and M.
    2. Product of N even numbers between two ranges of a and b.
    3. Sum of all odd numbers that are divisible by 3 using recursion and iteration.