- 1. Write a shell script to print the sum of two numbers
- 2. Write a program to add two numbers accept through keyboard Sample Output:

**Original array:** [10, 20, 30]

After append values to the end of the array:

[10 20 30 40 50 60 70 80 90]

3. Write a program to compute the total and average of four numbers. Sample Output:

Compute the total and average of four numbers :

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Input 1st two numbers (separated by space): 25 20

Input last two numbers (separated by space): 15 25

The total of four numbers is: 85

The average of four numbers is: 21.25

- 4. Write a program to swap first and last digits of any number Sample Output: Input any number: 12345

  The number after swapping the first and last digits are: 52341
- 5. Write a program to check whether a given length of three sides form a right triangle.
- 6. Write a program to read an integer n and prints the factorial of n, assume that n = 10
- 7. Write a program to replace all the lower-case letters of a given string with the corresponding capital letters.
- 8. Write a C++ program to compute the sum of the specified number of Prime numbers. For example when n = 7, s = 2 + 3 + 5 + 7 + 11 + 13 + 17 = 58
- 9. Write a shell program to find if the inputted number is even or odd.

- 10. Write a shell program to backup all c files.
- 11..Write a shell program to compute the bill amount by applying below rules
  - a. if the purchase amount is less than 1000, then the applicable tax is 5% and the discount is 10%
- b. if the amount is 1000 or greater then the tax applicable is 7% and the discount is 20%.
  - 12..Write a shell program to compare two strings
  - 13. Write a shell program to find if the inputted year is leap or not
  - 14..Write a shell program to generate a Fibonacci series.
  - 15. Write a shell program to find the greatest number of given 3 numbers as command line arguments.
  - 16. Write a shell program to read an integer and display its digits in the reverse order.
  - 17. Write a shell program to sort given numbers.
  - 18. Build a calculator with basic operations add, subtract, multiply and divide using shell program switch statement.
  - 19.. Write a shell program to convert a decimal number to binary equivalent.
  - 20..Write a shell program to generate all combinations of digits 1,2,3 to form different numbers using loops.

- 21. Using a fork creates a child process which will execute the command "ls". Take precaution that the parent will not terminate before the child.
- 22. Write a C program to create a child process. Child should print its pid and its parent's pid and should exit by printing a message as "Child Exiting ...". Parent should print its pid and should exit by printing a message as "Parent Exiting ..".
- 23. Write a program to create one child. Execute some code in the child such that the parent exits before the child. Showing that the child still remains under execution also mentions the new parent process ID of the child.
- 24. Write a program to create one child such that the child exists before execution of the parent completes. As long as the parent remains under execution, show the status of the child. If the child still appears in the process list then change your program such that, child is not found the process list, as soon as its execution gets completed