1. Program to display your name.
2. Program to add, subtract, multiply, and divide two whole numbers.
3. Program to find simple interest.
4. Program to convert a temperature given in Celsius to Fahrenheit.
5. Program to find square root of a given number.
6. Program to find power of a given number.
7. Program to find area and circumference of circle.
8. Program to find area and perimeter of a rectangle.
9. Program to find price of n mangos given the price of a dozen mangos.
10. Program to convert pounds to kilograms.
11. Program to find the rupee equivalent of U.S. dollars.
12. Program to print a six digit integer in reverse order.
13. Program to sum the digits of a positive integer which is 5 digits long.
14. Program to express a length given in millimeters in meters, centimeters, and millimeters.
15. Program to calculate discount. If purchased amount is greater than or equal to 1000, discount is 5%.
16. Program to calculate discount. If purchased amount is greater than or equal to 1000, discount is 5%. If purchased amount is less than 1000, discount is 3%.
17. Program to calculate discount

a) If purchased amount is greater than or equal to 5000, discount is 10%
b) If purchased amount is greater than or equal to 4000 and less than 5000, discount is 7%
c) If purchased amount is greater than or equal to 3000 and less than 4000, discount is 5%
d) If purchased amount is greater than or equal to 2000 and less than 3000, discount is 3%
e) If purchased amount is less than 2000, discount is 2%

18. Program to check whether a number is even or odd.
19. Program to calculate the simple interest.

a) If balance is greater than 99999, interest is 7 %.
b) If balance is greater than or equal to 50000 and less than 100000interest is 5 %.
c) If balance is less than 50000, interest is 3%.

20. Admission to a professional course is subject to the following conditions:

a)Marks in mathematics >= 60
b)Marks in physics >= 50
c)Marks in chemistry >= 40
d)Total in all three subjects >= 200

OR

Total in mathematics and physics >=150
Write a program to process the applications to list eligible candidate.

21. A leap year should meet the following condition:

a) For non-century years it should be exactly divisible by 4.
b) For century years it should be exactly divisible 400.

Write a program to check a year for leap.

22. Rates of tax on gross salary are as shown below:

23.

Income	Tax
Less than 10,000	Nill
Rs. 10,000 to 19,999	10%
Rs. 20,000 to 39,999	15%
Rs. 40,000 to above	20%

Write a program to compute the net salary after deducting the tax for the given information.

24. Jet Company gives 5% commission to its salesman if their monthly sales are less than Rs. 10,000 and a 10% commission if it is equal to or greater than Rs. 10,000. Write a program to calculate commission at the end of the month.

25. A bank accepts deposits for one year or more and the policy it adopts on interest rate is as follows:

a) If a deposit is less than Rs. 1,000 and for 2 or more years the interest rate is 5 percent compounded annually.

b) If a deposit is Rs. 1,000 or more but less than Rs. 5,000 and for 2 or more years the interest rate is 7 percent compounded annually.

c) If a deposit is more than Rs. 5,000 and is for 1 year or more the interest rate is 8 percent compounded annually.

d) On all deposits for 5 years or more interest is 10 percent compounded annually

e) On all other deposits not covered by the above conditions the interest is 3 percent compounded annually.

At the time of withdrawal a customer data is given with the amount deposited and the number of years the money has been with the bank. Write a program to obtain the money in the customer's account and the interest credited at the time on withdrawal.

26. program to print the largest number among three numbers input by the user.

27. Program to find the roots of a quadratic equation using discriminant.

28. Program to compare two numbers.

29. Given marks in five subjects. Write a program (a) to display "PASS" or "FAIL" if assumed pass marks is 45 in each subject, (b) to find percentage of marks obtained, and (c) to find division for "PASS" students assuming that 80% and above for "DISTINCTION", 60% and above for "FIRST DIVISION" otherwise "SECOND DIVISION".

30. Write a program using switch statement to display EXCELLENT, VERY GOOD, GOOD, SATISFACTORY, or FAIL if the user enters A, B, C, D, or E respectively.

31. program to display number of days in a month using switch statement.

32. Write a program using switch statement to develop a simple calculator for +, -, *, /, and % operators.

33. A cloth showroom has announced the following seasonal discounts on purchase of items

---

Purchase amount	Discount	
	Mill cloth	Handloom items
0 – 100	-	5%
101 – 200	5%	7.5%
201 – 300	7.5%	10%
Above 300	10%	15%

Write a program using switch and if statements to compute the net amount to be paid by a customer.

34. program to display your name 10 times using all the three looping statements.

35. program to display first n natural numbers, their sum, and their average using all the three looping statements.

36. program that displays the temperatures from 0 degrees Celsius to 100 degrees Celsius and their Fahrenheit equivalent.

37. program to calculate sum of first 10 even number.

38. program to find out sum of all numbers completely divisible by 5 among n numbers given by the user.

39. program to determine the sum of the harmonic series $(1+ 1/2 + 1/3 + 1/4 + ... + 1/n)$ for a given value of n.

40. program to find the sum of the series $1 + x^2 + 3x^2 + 4x^2 + ... + nx^2$.

41. program that calculates the sequence $1/1! + 2/2! + 3/3! + ... + n/n$, Where n is the number of input by the user.

42. program to display sum of the following series up to n terms.

Sum = x - x^2 + x^3 - x4+.......

43. program to find X of the following series for the given value of a and N.

X = a – a^2 /2 + a^3/3 – a^4/4..................up to N.

44. Given an integer, write a program to reverse and print it.
45. program that computes the sum of the digits of the given integer number.
46. given an integer, write a program to check it for palindrome.
47. program to find factorial of a number.
48. program to obtain the first 25 numbers of Fibonacci series.
49. program to display all prime numbers less than 100.
50. program to display all the leap years starting from 1900 to 2000.
51. Write a program to display the following menu

a. To find area of circle
b. To check the given number is odd or even.
c. To find the sum of N numbers.
d. Exit.

Perform above task until the user wants to exit.

52. program to print the following outputs using for loops

1
2 2
3 3 3
4 4 4 4
5 5 5 5 5

53. program to find greater number between two numbers using function.
54. program using function to calculate and return sum of following series up to n terms; where x and n are supposed as passed by main program; sum = x-x^2 +x^3-x^4+.....
55. A five digit positive integer is entered through the keyboard; write program using function to calculate the sum of the digits of the number. The function should receive the integer from main () and output also be printed through main ().
56. program to calculate factorial of a number using recursive function and the same program without using recursive function.
57. program to calculate b n using recursive as well as non recursive function.
58. program to find sum of first n natural numbers using recursive function.
59. program to find product of first n natural numbers using recursive function.
60. program to find n^{th} Fibonacci number using recursive function.
61. program to find Fibonacci series up to n terms using recursive function.
62. Write macros to compute area and circumference of circle and make a program to use this macro.
63. Write a program to calculate area and perimeter of a rectangle using macros.
64. program to count number of times a function executes using static local variable.
65. Program to read n numbers in an array and display their sum and average.
66. Twenty-five numbers are entered through the keyboard into an array; write a program find out how many of them are even and how many of them are odd.
67. Write a program to display largest and smallest number among 10 numbers stored in an array.
68. Program to search an element in array using sequential search.
69. Program to search an element in array using binary search.
70. Program to sort numbers stored in an array using bubble sort in ascending order.
71. Program to sort numbers stored in an array using bubble sort in descending order.
72. Program to read name list of 50 students and display them in alphabetical form.
73. Program to read a string and count the number of vowels and consonants in it.
74. Write a program to read a line of text and delete all the vowels from it.
75. Program to check whether a given string is a palindrome or not.

76. Program to add two 3×2 matrices and print the result in matrix form.
77. Program that accepts the elements of 3×3 matrix and calculate the sum of all elements of the matrix.
78. Program to read 4×4 matrix and find sum of each row.
79. Program to read two-dimensional matrix and display its transposed form.
80. Program to convert a 4×4 matrix to upper triangular and display the result in matrix form.
81. Program to convert a 4×4 matrix to lower triangular and display the result in matrix form.
82. Program to multiply two rectangular matrices and display the resultant matrix.
83. program to read n numbers in an array and display their sum and average; Use functions to read input and find sum and average.
84. program to add two 3×4 matrices and print the result in matrix form; use separate functions to take input and to add and display the result.
85. program to swap two numbers using a function and by passing arguments as references.
86. program to read n numbers in an array and display their sum and average. Use the concept of pointer to access array elements.
87. using pointer write a program to get n integer number and display them in ascending order (use malloc or calloc to reserve memory).
88. using pointer write a program to add two 3×2 matrices and print the result in matrix form.
89. program to search the given name among the list of names of n students using pointer.
90. program to read 100 students record with fields (roll_no, name, class, and marks in 5 subjects) and display their records along with their percentage of marks obtained.
91. Program to read 100 students record with following fields and display the record of B.Sc. IT faculty only.

Roll No.	Name	Faculty	DOB(date of birth		
			dd	mm	yy

92. create a structure to specify data on customer in a bank. The data to store is: Acc. No., Name, and Balance in account. Assume maximum of 200 customers in the bank.
a. Write a function to print the Acct. no. and name of each customer with balance below Rs. 100.
b. If a customer gives a request for withdrawl or deposit it is given in the form: Acct. no., Amount (1 for deposit and 2 for withdrawl)
Write a program to give a message "the balance is insufficient" for the specified withdraw.
93. In a bank there are N customers with attributes name, account_no, and balance; write a program to find out who has the highest balance in the bank.
94. program using structure data to read name, roll, marks in three subjects of 20 students and print the record in the ascending order of the total marks obtained in three subjects.
95. program to read all numbers from the input file "values.dat" and sores the average of these numbers in an output file named as "average.res".
96. create a file named "university.dat". Write a program to keep the records on N colleges under Pokhara University if a file. These records contain name, location, and no_of_faculties of the college and display the names of colleges in Kathmandu location.
97. create a file named "employee.dat". Write a program to store records of N employee in a file. These records contain name, identification number, office name, and occupation of the employee. Also display name of those employees whose office name is "Everest Bank" and occupation is "manager".
98. create a structure to specify data on customers in a bank with the parameters Acct. No., Name, Balance in Account. Assume there are 1000 customers in the bank. Write a program to store the data in "CUST.DAT" file and print the Acct. No. and Name of each customer with balance below Rs. 1000.
99. write a program to open a file named "student.txt" to keep the records of students (roll_no, name, course, and semester) in a write mode and perform the following operations:
a. Insert records in to the file.

b. Display all those records for which course is B.Sc. IT and semester is 2.

100.   write a program that creates a file named "employee.dat" to keep the records of N employees of a company and print the records in the ascending order of the employee_id. A typical employee record will be employee id, name, designation, and salary.

101.   suppose a store has a number of items in their inventory and that each item is supplied by at most two suppliers. Create inventory and supplier files. Find the addresses of all suppliers who supply more than 10 different items. Discuss any changes in data structure you would suggest to simplify solving this problem.