# Array 1-

```
Enter the size of array: 5
Enter elements: 3
67
26
4
7
Largest number in the array is: 67
```

# Array 2-

```
Enter the size of array: 5
Enter elements: 67
26
7
33
1
Sum of all the elements entered: 134
Average of all the elements entered: 26.80
```

# Array 3-

```
Enter the size of array: 5
Enter elements: 67
26
7
33
1
Original Array:
67 26 7 33 1
Sorted Array:
1 7 26 33 67
```

# Array 4-

```
Enter number of elements: 5
Enter 5 elements:
3
3
33
55
77

Frequency of elements:
3 occurs 2 times
33 occurs 1 times
55 occurs 1 times
77 occurs 1 times
```

# Array 5-

```
Enter the size of first array: 5
Enter the size of second array: 5
Enter elements of first array: 1
2
3
4
5
Enter elements of second array: 10
9
8
7
6
Merged Array: 1 2 3 4 5 10 9 8 7 6
```

# Array 6-

```
Enter number of rows: 3
Enter number of columnns: 3
Enter elements in first array: 1
2
3
4
5
6
7
8
9
Enter elements in second array: 9
8
7
6
5
4
3
2
1
Added matrix:
10 10 10
10 10 10
10 10 10
```

## Array 7-

```
Enter number of rows: 3
Enter number of columnns: 3
Enter elements: 33
67
26
7
3
4
1
9
5
Original matrix:
33 67 26
7 3 4
1 9 5
Tranpose of the matrix:
33 7 1
67 3 9
26 4 5
```

## Array 8-

```
Enter size of square matrix: 3
Enter elements of the matrix:
1
2
3
4
5
6
7
8
9
Sum of main diagonal = 15
Sum of secondary diagonal = 15
```

## Conditional Looping 1-

```
Enter a number: 5
5 is Odd.
```

## Conditional Looping 2-

```
Enter three numbers: 33
67
26
67 is the largest.
```

## Conditional Looping 3-

```
Enter a year: 2025
2025 is not a leap year.
```

## Conditional Looping 4-

```
Enter value of N: 10
Sum of natural numbers up to 10 = 55
```

## Conditional Looping 5-

```
Enter a number: 5
5 x 1 = 5
5 x 2 = 10
5 x 3 = 15
5 x 4 = 20
5 x 5 = 25
5 x 6 = 30
5 x 7 = 35
5 x 8 = 40
5 x 9 = 45
5 x 10 = 50
```

## Conditional Looping 6-

```
Enter a number: 260706
Reversed number = 607062
```

## Conditional Looping 7-

```
---- Calculator Menu ----
1. Addition
2. Subtraction
3. Multiplication
4. Division

Enter your choice: 2
Enter two numbers: 3
5
Result = -2.00
```

## Conditional Looping 8-

```
Enter a number: 10
Factorial of 10 = 3628800
```

## Conditional Looping 9-

```
Enter a number: 676
676 is a palindrome.
```

## File Handling 1-

```
Enter text to write into the file:
This is a text file
Data written to output.txt successfully.
```

# File Handling 2-

```
Contents of the file:
This is a text file
```

# File Handling 3-

```
Characters: 20
Words: 5
Lines: 1
```

# File Handling 4-

```
File copied successfully!
```

# File Handling 5-

```
Enter text to append:
This file has been appeneded.
Data appended successfully.
```

# File Handling 6-

```
Enter number of students: 3

Enter details of student 1
Name: Rahul
Roll Number: 1
Marks: 45

Enter details of student 2
Name: Anjali
Roll Number: 2
Marks: 43

Enter details of student 3
Name: Dev
Roll Number: 3
Marks: 33

Records stored successfully!

Student Records:
Name: Rahul     Roll: 1 Marks: 45.00
Name: Anjali    Roll: 2 Marks: 43.00
Name: Dev       Roll: 3 Marks: 33.00
```

# File Handling 7-

```
Sum = 150
Average = 30.00
```

## File Handling 8-

```
Files merged successfully into merged.txt
```

## Functions 1-

```
Enter a number: 3
3 is a prime number.
```

## Functions 2-

```
Enter a number: 5
Factorial of 5 = 120
```

## Functions 3-

```
Enter two numbers: 2
5
GCD of 2 and 5 is 1
```

## Functions 4-

```
Enter an integer: 654
Reverse = 456
```

## Functions 5-

```
Enter a number: 456
Sum of digits = 15
```

## Functions 6-

```
Enter a string: nitin
The string is palindrome.
```

# Functions 7-

```
Enter rows: 3
Enter columns: 3

Enter elements of Matrix A:
1
2
3
4
5
6
7
8
9

Enter elements of Matrix B:
1
2
3
4
5
6
7
8
9

Resultant Matrix (A + B):
2 4 6
8 10 12
14 16 18
```

# Functions 8-

```
Enter number of elements: 3
Enter 3 elements:
44
33
22
Average = 33.00
```

# Functions 9-

```
Before callByValue: x = 5
Inside callByValue function: a = 15
After callByValue: x = 5

Before callByReference: y = 5
Inside callByReference function: b = 15
After callByReference: y = 15
```

# Pointers 1-

```
Enter two numbers: 6
7
Before swapping: x = 6, y = 7
After swapping:  x = 7, y = 6
```

# Pointers 2-

```
Enter number of elements: 5
Enter 5 elements:
1
3
5
7
9
Sum of array elements = 25
```

# Pointers 3-

```
Enter a string: Milkshake
Length = 9
```

# Pointers 4-

```
Enter a string: Strawberry
Strawberry
```

# Pointers 5-

```
Enter roll number: 33
Enter marks: 97
34 102.00
```

# Pointers 6-

```
Enter number of elements: 5
Enter 5 elements:
1
3
5
7
9
Largest = 9, Smallest = 1
```

# Pointers 7-

```
Enter number of elements: 5
Enter 5 elements:
1
3
5
7
9
Array elements are: 1 3 5 7 9
```

# Pointers 8-

```
Enter a value for x: 5
5
5
5
```

# Structure 1-

```
Enter number of students: 2

Enter details of student 1:
Roll number: 1
Name: Yashita
Marks: 1

Enter details of student 2:
Roll number: 2
Name: Ananya
Marks: 49

Student Details

Student 1:
Roll: 1
Name: Yashita
Marks: 1.00

Student 2:
Roll: 2
Name: Ananya
Marks: 49.00
```

# Structure 2-

```
Enter number of students: 3

Enter details of student 1:
Roll number: 1
Name: Bhanvi
Marks: 35

Enter details of student 2:
Roll number: 2
Name: Dhairya
Marks: 25

Enter details of student 3:
Roll number: 3
Name: Devanshi
Marks: 45

Student with Highest Marks
Roll: 3
Name: Devanshi
Marks: 45.00
```

# Structure 3-

```
Enter number of books: 3

Enter details of book 1:
Title: It
Author: StephenKing
Price: 379

Enter details of book 2:
Title: Dune
Author: FrankHerbert
Price: 329

Enter details of book 3:
Title: November
Author: CollenHoover
Price: 150

Books Priced Above 500
No books priced above 500.
```

# Structure 4-

```
Enter number of students: 4

Enter details of student 1:
Name: Madhur
Marks: 14

Enter details of student 2:
Name: Anmol
Marks: 12

Enter details of student 3:
Name: Divyanshu
Marks: 12

Enter details of student 4:
Name: Pawani
Marks: 13

Average Marks of 4 students = 12.75
```

# Structure 5-

```
Enter employee name: Divyanshu
Enter Basic Salary: 10000
Enter DA: 5000
Enter HRA: 4000

Employee Salary Details
Name: Divyanshu
Basic Salary: 10000.00
DA: 5000.00
HRA: 4000.00
Gross Salary: 19000.00
```

# Structure 6-

```
Enter Employee ID: 67
Enter Name: Madhur
Enter Salary: 85000

Employee Details
ID: 67
Name: Madhur
Salary: 85000.00
```

# Structure 7-

```
Enter roll number: 43
Enter name: Anmol
Enter Date of Birth (DD MM YYYY): 03 04 2006

--- Student Details ---
Roll: 43
Name: Anmol
DOB: 3-4-2006
```

# Structure 8-

```
Enter number of students: 3

Enter details of student 1:
Roll number: 49
Name: Madhur
Marks: 50

Enter details of student 2:
Roll number: 43
Name: Anmol
Marks: 45

Enter details of student 3:
Roll number: 18
Name: Pawani
Marks: 43

Sorted Student Records

Student 1:
Roll: 18
Name: Pawani
Marks: 43.00

Student 2:
Roll: 43
Name: Anmol
Marks: 45.00

Student 3:
Roll: 49
Name: Madhur
Marks: 50.00
```