

1. WAP to enter two numbers and swap it.
2. WAP to enter two numbers and swap it without using third variable.
3. WAP to enter a character in small letter and convert it into capital letter.
4. WAP to enter a character in capital letter and convert it into small letter.
5. WAP to accept the Principal Amount, Rate of Interest and number of years then find out the Simple Interest.
6. WAP to check whether a year is leap year or not.
7. WAP to find maximum between two numbers.
8. WAP to check whether a character is uppercase or lowercase alphabet.
9. WAP to check whether an alphabet is vowel or consonant.
10. WAP to input basic salary of an employee and calculate gross salary according to given conditions.

Basic Salary < 10000 :

DA = 80%

HRA = 20%

Basic Salary ≥ 10000 :

DA = 90%

HRA = 30%

11. WAP to find maximum between three numbers.
12. WAP to input any key from keyboard and check whether it is an alphabet, digit or special character.
13. WAP to find maximum between three numbers using Nested if-else.
14. WAP to check whether a year is leap year or not using Nested if-else.
15. WAP to input marks of five subjects, calculate percentage and grade according to given conditions:  
 If percentage ≥ 90%, Grade = A  
 If percentage ≥ 80%, Grade = B  
 If percentage ≥ 70%, Grade = C  
 If percentage ≥ 60%, Grade = D  
 If percentage ≥ 40%, Grade = E  
 If percentage < 40%, Grade = F
16. WAP to input amount from user and print minimum number of notes (Rs. 500, 100, 50, 20, 10, 5, 2, 1) required for the amount.
17. WAP to print day name of week using switch-case.
18. WAP to check whether an alphabet is vowel or consonant using switch-case.
19. WAP to print total number of days in a month using switch-case.
20. WAP to perform calculation of 2 number using switch. Like enter 2 number and an operator(+, -, \*, /) which print the result based on operator.
21. WAP to check whether a number is even or odd using conditional operator.
22. WAP to convert lower case alphabet to upper case using conditional operator.
23. WAP to find maximum between two numbers using conditional operator.
24. WAP to find maximum between three numbers using conditional operator.
25. WAP to find maximum between four numbers using conditional operator.
26. Print 1 to 100.
27. Print 100 to 1.
28. Display all even numbers upto 100.
29. Display all odd numbers upto 100.
30. WAP to print 1 to n.
31. WAP to print the multiplication table of a number.
32. WAP to calculate factorial of a given number.
33. Multiplication of 2 numbers without using \* operator.
34. WAP to print all natural numbers in reverse (from n to 1).
35. WAP to find sum of all natural numbers between 1 to n.
36. WAP to find sum of all even numbers between 1 to n.
37. WAP to find all factors of a number.
38. WAP to count number of factors of a given number.
39. WAP to check whether a number is prime number or not.
40. WAP to check whether a number is perfect number or not.
41. WAP to check whether a number is special number or not.
42. WAP to find power of a number.

43. WAP to count number of digits in a number.
44. WAP to calculate sum of digits of a number.
45. WAP to enter a number and print its reverse.
46. WAP to check whether a number is palindrome or not.
47. WAP to check whether a number is armstrong number or not.
48. WAP to print Fibonacci series up to n terms.
49. WAP to print nth Fibonacci term.
50. WAP for the addition of N numbers.
51. WAP to print Sum of the Positive and Negative numbers from given set of numbers. (Until pressed zero)
52. WAP to find the Largest of N numbers.
53. WAP to find Second Largest number from n numbers.
54. WAP to find HCF(GCD) of two numbers.
55. WAP to find LCM(Least Common Multiple) of two numbers.
56. WAP to print all palindrome numbers between 1 to n.
57. WAP to check whether a number is strong or not.
58. WAP to print all armstrong numbers between 1 to n.
59. WAP to print all strong numbers between 1 to n.
60. WAP to print all perfect numbers between 1 to n.
61. WAP to print all prime numbers between 1 to n.
62. WAP to print all prime factors of a number.

63. Pattern 1 (n=5)

```
*  
**  
***  
****  
*****
```

64. Pattern 2 (n=5)

```
1  
22  
333  
4444  
55555
```

65. Pattern 3 (n=5)

```
1  
12  
123  
1234  
12345
```

66. Pattern 4 (n=5)

```
1  
2 3  
4 5 6  
7 8 9 10  
11 12 13 14 15
```

67. Pattern 5 (n=5)

```
5  
44  
333  
2222  
11111
```

68. Pattern 6 (n=5)

5  
54  
543  
5432  
54321

69. Pattern 7 (n=5)

\*\*\*\*\*  
\*\*\*\*  
\*\*\*  
\*\*  
\*

70. Pattern 8 (n=5)

55555  
4444  
333  
22  
1

71. Pattern 9 (n=5)

12345  
1234  
123  
12  
1

72. Pattern 10 (n=5)

54321  
5432  
543  
54  
5

73. Pattern 11 (n=5)

11111  
2222  
333  
44  
5

74. Pattern 12 (n=5)

\*  
\*\*  
\*\*\*  
\*\*\*\*  
\*\*\*\*\*

75. Pattern 13 (n=5)

1  
22  
333  
4444  
55555

76. Pattern 14 (n=5)

```
1
12
123
1234
12345
```

77. Pattern 15 (n=5)

```
5
44
333
2222
11111
```

78. Pattern 16 (n=5)

```
5
54
543
5432
54321
```

79. Pattern 17 (n=5)

```
*
***
*****
*****
*****
```

80. Pattern 18 (n=5)

```
1
123
12345
1234567
123456789
```

81. Pattern 19 (n=5)

```
1
232
34543
4567654
567898765
```

82. Pattern 20 (n=5)

```
5
545
54345
5432345
543212345
```

83. Pattern 21 (n=5)

```
*****
*****
*****
***
*
```

84. Pattern 22

(n=4)

1111112  
3222222  
3333334  
5444444

(n=6)

1111112  
3222222  
3333334  
5444444  
5555556  
7666666

85. Pattern 23 (n=4, s=3)

3  
44  
555  
6666  
6666  
555  
44  
3

86. Pattern 24 (n=4)

1  
2\*3  
4\*5\*6  
7\*8\*9\*10  
7\*8\*9\*10  
4\*5\*6  
2\*3  
1

87. Pattern 25 (n=5)

1  
3\*2  
4\*5\*6  
10\*9\*8\*7  
11\*12\*13\*14\*15

88. Pattern 26

(n=4)

1\*2\*3\*4  
9\*10\*11\*12  
13\*14\*15\*16  
5\*6\*7\*8

(n=5)

1\*2\*3\*4\*5  
11\*12\*13\*14\*15  
21\*22\*23\*24\*25  
16\*17\*18\*19\*20  
6\*7\*8\*9\*10

89. Traversing of an array.
90. Print the sum of elements of an array.
91. Insertion of an element in the array by index.
92. Deleting an element in the array by index.
93. Merging of two arrays.
94. Sorting of an array.
95. Linear Search (Sequential Search).
96. Binary Search.
97. WAP to count total number of even and odd elements in an array.
98. WAP to find maximum and minimum element in an array.
99. WAP to reverse an array (without using second array).
100. WAP to delete all duplicate elements from an array.
101. WAP to convert Decimal to Binary number system.
102. WAP to convert Decimal to Octal number system.
103. WAP to convert Decimal to Hexadecimal number system.
104. WAP to enter values to a 2-D array and print them in matrix form.
105. WAP to enter values for an integer matrix of M rows and N columns and count number of non-zero values and number of even numbers present in the matrix.
106. WAP to find the sum of boundary elements of the matrix.
107. WAP to find the sum of nonzero even boundary elements of a matrix.
108. WAP to find the sum of diagonal elements of a square matrix.
109. WAP to find transpose of a matrix.
110. WAP to find multiplication of 2 matrix.
111. Write an UDF to print '\_' n times.
112. Write an UDF to print '#', char and '-' n times.
113. WAF to count no. of digits of a number.
114. WAF to convert an integer into binary or octal.
115. WAF to check if a number is prime or not.
116. WAF to print all the prime factors of a given number.
117. WAF to find sum of series:  $1 + 1/4 + 1/9 + 1/16 + \dots$  up to n terms.
118. WAF to find whether a number is perfect or not.
119. WAP to print twin primes less than a given number.
120. WAF to find multiplicative persistence of a given number.
121. WAF to find amicable pair within a range.
122. WAF that gives the minimum number that will be added to it to get a perfect square.
123. WAF to sum all the elements of an array.
124. WAP to find sum of first 'n' natural numbers using recursion.
125. WARF to find  $b^n$ .
126. Find nth Fibonacci term using recursive function.
127. WARF to count number of digits in an integer number.
128. WARF to find GCD of two numbers.
129. WARF to print first 'n' natural numbers in reverse order.
130. WARF to find GCD of 'n' numbers in an array.
131. WAP to find size of int or float type in the system without using sizeof() function.
132. WAP to check if  $a[i]=i[a]$ .
133. WAP to calculate the sum of array elements using pointer.
134. Void Pointer
135. int to char Pointer
136. Accessing elements beyond array size
137. Constant Pointer
138. Pointer to Function
139. Pointer to Array
140. Passing of 2-D Array to a Function
141. WAP to display content of particular member using pointer.
142. WAP to define a structure of an employee record, load info of employee and display them.
143. WAF to read employee record and a function to display them.
144. WAP to define structure of a book, load and display info of the book and find size of structure.

145. WAP to load info of five different books and display the info.
146. WAP to read info of a book and display the result using function.
147. WAP to load info of five books and display them using function.
148. WAP to load info of a book and access the info using struct pointer.
149. Passing Array of Structure to Function
150. Enter info of 5 books and sort the info with respect to pages of the books in ascending order and display them.
151. WAP to enter and show students info such as name,roll no and date of birth using nested structure.