

BASIC PROGRAMMING

BASIC PROGRAMS

1. WAP to enter two numbers and find their sum.
2. WAP to enter two numbers and perform all arithmetic operations.
3. WAP to enter length and breadth of a rectangle and find its perimeter.
4. WAP to enter length and breadth of a rectangle and find its area.
5. WAP to enter radius of a circle and find its diameter, circumference and area.
6. WAP to enter length in centimetre and convert it into meter and kilometre.
7. WAP to enter temperature in °Celsius and convert it into °Fahrenheit.
8. WAP to enter temperature in Fahrenheit(°F) and convert it into Celsius(°C)
9. WAP to convert days into years, weeks and days.
10. WAP to find power of any number xy (x^y).
11. WAP to enter any number and calculate its square root.
12. WAP to enter two angles of a triangle and find the third angle.
13. WAP to enter base and height of a triangle and find its area.
14. WAP to calculate area of an equilateral triangle.
15. WAP to enter marks of five subjects and calculate total, average and percentage.
16. WAP to enter P, T, R and calculate Simple Interest.
17. WAP to enter P, T, R and calculate Compound Interest.

IF ELSE

1. WAP to find maximum between two numbers.
2. WAP to find maximum between three numbers.
3. WAP to check whether a number is even or odd.
4. WAP to check whether a year is leap year or not.
5. WAP to check whether a number is negative, positive or zero.
6. WAP to check whether a number is divisible by 5 and 11 or not.
7. WAP to count total number of notes in given amount.
8. WAP to check whether a character is alphabet or not.
9. WAP to input any alphabet and check whether it is vowel or consonant.
10. WAP to input any character and check whether it is alphabet, digit or special .
11. WAP to check whether a character is uppercase or lowercase alphabet.
12. WAP to input week number and print week day.
13. WAP to input month number and print number of days in that month.
14. WAP to input angles of a triangle and check whether triangle is valid or not.
15. WAP to input all sides of a triangle and check whether triangle is valid or not.
16. WAP to check whether the triangle is equilateral, isosceles or scalene triangle.
17. WAP to find all roots of a quadratic equation.
18. WAP to calculate profit or loss.
19. WAP to input marks of five subjects Physics, Chemistry, Biology, Mathematics and Computer. Calculate percentage and grade according to following:
Percentage > 90% : Grade A
Percentage > 80% : Grade B
Percentage > 70% : Grade C
Percentage > 60% : Grade D
Percentage > 40% : Grade E
Percentage < 40% : Grade F
20. WAP to input basic salary of an employee and calculate its Gross salary according to following:
Basic Salary >= 10000 : HRA = 20%, DA = 80%
Basic Salary >= 20000 : HRA = 25%, DA = 90%
Basic Salary >= 30000 : HRA = 30%, DA = 95%
21. WAP to input electricity unit charges and calculate total electricity bill according to the given condition:
For first 50 units Rs. 0.50/unit
For next 100 units Rs. 0.75/unit
For next 100 units Rs. 1.20/unit
For unit above 250 Rs. 1.50/unit
An additional surcharge of 20% is added to the bill

SWITCH CASE

1. WAP to check whether an alphabet is vowel or consonant using switch case.
2. WAP to print day of week name using switch case.
3. WAP print total number of days in a month using switch case.
4. WAP to find maximum between two numbers using switch case.
5. WAP to check whether a number is even or odd using switch case.
6. WAP to find roots of a quadratic equation using switch case.
7. WAP to create Simple Calculator using switch case.

LOOPS

1. WAP to print all natural numbers from 1 to n. - using while loop
2. WAP to print all natural numbers in reverse (from n to 1). - using while loop
3. WAP to print all alphabets from a to z. - using while loop
4. WAP to print all even numbers between 1 to 100. - using while loop
5. WAP to print all odd number between 1 to 100.
6. WAP to print sum of all even numbers between 1 to n.
7. WAP to print sum of all odd numbers between 1 to n.
8. WAP to print table of any number.
9. WAP to enter any number and calculate sum of all natural numbers between 1 to n.
10. WAP to enter any number and find its first and last digit.
11. WAP to enter any number and calculate sum of its digits.
12. WAP to enter any number and calculate product of its digits.
13. WAP to swap first and last digits of any number.
14. WAP to enter any number and print its reverse.
15. WAP to enter any number and check whether the number is palindrome or not.
16. WAP to enter any number and print it in words.
17. WAP to print all ASCII character with their values.
18. WAP to find power of any number using for loop.
19. WAP to enter any number and find the sum of first and last digit of the number.
20. WAP to enter any number and print all factors of the number.
21. WAP to enter any number and calculate its factorial.
22. WAP to find HCF (GCD) of two numbers.
23. WAP to find LCM of two numbers.
24. WAP to enter any number and check whether it is Prime number or not.
25. WAP to enter any number and check whether it is Armstrong number or not.

LOOPS

26. WAP to enter any number and check whether it is Perfect number or not.
27. WAP to enter any number and check whether it is Strong number or not.
28. WAP to print all Prime numbers between 1 to n.
29. WAP to print all Armstrong numbers between 1 to n.
30. WAP to print all Perfect numbers between 1 to n.
31. WAP to print all Strong numbers between 1 to n.
32. WAP to enter any number and print its prime factors.
33. WAP to find sum of all prime numbers between 1 to n.
34. WAP to print Fibonacci series up to n terms.
35. WAP to find one's complement of a binary number.
36. WAP to find two's complement of a binary number.
37. WAP to convert Binary to Octal number system.
38. WAP to convert Binary to Decimal number system.
39. WAP to convert Binary to Hexadecimal number system.
40. WAP to convert Octal to Binary number system.
41. WAP to convert Octal to Decimal number system.
42. WAP to convert Octal to Hexadecimal number system.
43. WAP to convert Decimal to Binary number system.
44. WAP to convert Decimal to Octal number system.
45. WAP to convert Decimal to Hexadecimal number system.
46. WAP to convert Hexadecimal to Binary number system.
47. WAP to convert Hexadecimal to Octal number system.
48. WAP to convert Hexadecimal to Decimal number system.
49. WAP to print Pascal triangle upto n rows.
50. Star pattern programs - WAP to print the given star patterns.

LOOPS

11111 11111 11111 11111 11111	11111 00000 11111 00000 11111	56789 4567 345 23 1	01010 01010 01010 01010 01010	11111 10001 10001 10001 11111
11111 1 1 1 1 1 1 11111	11111 11111 11011 11111 11111	1 23 345 4567 56789	10101 01010 10101 01010 10101	11011 11011 00000 11011 11011
10001 01010 00100 01010 10001	11111 22222 33333 44444 55555	13579 3579 579 79 9	12345 12345 12345 12345 12345	12345 23456 34567 45678 56789
1 23 345 4567 56789	12345 23455 34555 45555 55555	12345 2345 345 45 5	55555 45555 34555 23455 12345	12345 23451 34521 45321 54321
12345 21234 32123 43212 54321	54321 43212 32123 21234 12345	12345 2345 345 45 5	55555 54444 54333 54322 54321	55555 44445 33345 22345 12345
54321 54322 54333 54444 55555	12345 22345 33345 44445 55555	5 45 345 2345 12345	555555555 544444445 543333345 543222345 543212345	543222345 543333345 544444445 555555555
54321 5432 543 54 5	1 22 333 4444 55555	1 24 135 2468 13579	1 22 333 4444 55555	55555 4444 333 22 1
55555 4444 333 22 1	11111 2222 333 44 5	56789 4567 345 23 1	11111 2222 333 44 5	5 44 333 2222 11111
5 44 333 2222 11111	1 12 123 1234 12345	5 45 345 2345 12345	1 12 123 1234 12345	12345 1234 123 12 1
12345 1234 123 12 1	1 21 321 4321 54321	13579 3579 579 79 9	1 21 321 4321 54321	54321 4321 321 21 1
54321 4321 321 21 1	5 54 543 5432 54321	1 123 12345 1234567 123456789	5 54 543 5432 54321	54321 5432 543 54 5
1 2 3 4 5 1 16 17 18 19 6 123 15 24 25 20 7 12345 14 23 22 21 8 1234567 13 12 11 10 9 123456789				1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25

STRINGS

1. WAP to find length of a string.
2. WAP to copy one string to another string.
3. WAP to concatenate two strings.
4. WAP to compare two strings.
5. WAP to convert lowercase string to uppercase.
6. WAP to convert uppercase string to lowercase.
7. WAP to toggle case of each character of a string.
8. WAP to find total number of alphabets, digits or special character in a string.
9. WAP to count total number of vowels and consonants in a string.
10. WAP to count total number of words in a string.
11. WAP to find reverse of a string.
12. WAP to check whether a string is palindrome or not.
13. WAP to find first occurrence of a character in a given string.
14. WAP to find last occurrence of a character in a given string.
15. WAP to search all occurrences of a character in given string.
16. WAP to count occurrences of a character in given string.
17. WAP to find highest frequency character in a string.
18. WAP to find lowest frequency character in a string.
19. WAP to count frequency of each character in a string.
20. WAP to remove first occurrence of a character from string.
21. WAP to remove last occurrence of a character from string.
22. WAP to remove all occurrences of a character from string.
23. WAP to remove all repeated characters from a given string.
24. WAP to replace first occurrence of a character with another in a string.
25. WAP to replace last occurrence of a character with another in a string.
26. WAP to replace all occurrences of a character with another in a string.
27. WAP to find first occurrence of a word in a given string.
28. WAP to find last occurrence of a word in a given string.
29. WAP to search all occurrences of a word in given string.
30. WAP to count occurrences of a word in a given string.
31. WAP to remove first occurrence of a word from string.
32. WAP to remove last occurrence of a word in given string.
33. WAP to remove all occurrence of a word in given string.
34. WAP to trim leading white space characters in a string.
35. WAP to trim trailing white space characters in a string.
36. WAP to trim both leading and trailing white space characters in a string.
37. WAP to remove all extra blank spaces from a given string.

FUNCTIONS

1. WAP to find cube of any number using function.
2. WAP to find diameter, circumference and area of circle using functions.
3. WAP to find maximum and minimum between two numbers using functions.
4. WAP to check whether a number is even or odd using functions.
5. WAP to check whether a number is prime, Armstrong or perfect number using functions.
6. WAP to find all prime numbers between given interval using functions.
7. WAP to print all strong numbers between given interval using functions.
8. WAP to print all Armstrong numbers between given interval using functions.
9. WAP to print all perfect numbers between given interval using functions.
10. WAP to find power of any number using recursion.
11. WAP to print all natural numbers between 1 to n using recursion.
12. WAP to print all even or odd numbers in given range using recursion.
13. WAP to find sum of all natural numbers between 1 to n using recursion.
14. WAP to find sum of all even or odd numbers in given range using recursion.
15. WAP to find reverse of any number using recursion.
16. WAP to check whether a number is palindrome or not using recursion.
17. WAP to find sum of digits of a given number using recursion.
18. WAP to find factorial of any number using recursion.
19. WAP to generate nth Fibonacci term using recursion.
20. WAP to find GCD (HCF) of two numbers using recursion.
21. WAP to find LCM of two numbers using recursion.
22. WAP to display all array elements using recursion.
23. WAP to find sum of elements of array using recursion.
24. WAP to find maximum and minimum elements in array using recursion.

TERNARY & BITWISE OPERATORS

TERNARY OPERATOR

1. WAP to find maximum between two numbers using conditional / ternary operator.
2. WAP to find maximum between three numbers using conditional / ternary operator.
3. WAP to check whether a number is even or odd using conditional/ternary operator.
4. WAP to check whether year is leap year or not using conditional / ternary operator.
5. WAP to check whether character is an alphabet or not using conditional/ternary operator.

BITWISE OPERATOR

1. WAP to check Least Significant Bit (LSB) of a number is set or not.
2. WAP to check Most Significant Bit (MSB) of a number is set or not.
3. WAP to get nth bit of a number.
4. WAP to set nth bit of a number.
5. WAP to clear nth bit of a number.
6. WAP to toggle nth bit of a number.
7. WAP to get highest set bit of a number.
8. WAP to get lowest set bit of a number.
9. WAP to count trailing zeros in a binary number.
10. WAP to count leading zeros in a binary number.
11. WAP to flip bits of a binary number using bitwise operator.
12. WAP to total number of zeros and ones in a binary number.
13. WAP to convert decimal to binary number system using bitwise operator.
14. WAP to swap two numbers using bitwise operator.
15. WAP to check whether a number is even or odd using bitwise operator.