

## PROGRAM FOR PRACTICE

Q.1 WAP to print 1,3,4,6,.....,n

Q.2 WAP to print 1,4,9,16,.....,n

Q.3 WAP to print 2,4,6,.....,n

Q.4 WAP to print 1,8,27,.....,n

Q.5 WAP to print the following patterns:-

*	1	1	1	A	A	A	F	C	A
**	23	22	12	AB	BB	BC	ED	BB	BC
***	456	333	123	ABC	CCC	DEF	CBA	AAA	BCD

Q.6 WAP to print the following patterns:-

*	1	1	1	A	A	A	F	C	A
**	23	22	12	AB	BB	BC	ED	BB	BC
***	456	333	123	ABC	CCC	DEF	CBA	AAA	BCD

Q.7 WAP to print the following patterns:-

1*2*3*4*	1*2*3*4	****
1*2*3*	1*2*3	***
1*2*	1*2	**
1*	1	*

Q.8 WAP to print the following patterns:-

*****	*	1000
***	***	0100
*	*****	0010
		0001

## **PROGRAMS FOR PRACTICE**

1. WAP to calculate area of triangle.
2. WAP to convert total number of seconds into hours, minutes, and seconds.
3. WAP to read number of hours, minutes, and seconds and convert them into seconds.
4. WAP to read an amount in Rs. And find out number of 100, 50, 20, 10, 5, 2 rupee notes.
5. WAP to read quantity of 50,25,20,10,5,2,1 paise coins and convert them into Rs.
6. WAP to read basic salary from user and calculate gross salary where DA 40% of basic salary and HRA is 20% of basic salary.
7. WAP to read cost price and selling price of an item and find out how much loss or profit occurs.
8. WAP to read marks of three subjects of a student and print total, percentage and division.
9. WAP to read character and find out whether it is upper case letter, lower case letter, digit or special symbol.
10. WAP to read three numbers and find out maximum.
11. WAP to read four numbers and find out maximum.
12. WAP to read a number and calculate factorial.(using for loop)
13. WAP to read a number and check whether it is prime or not.(using for loop)(can be div by 2)
14. WAP to read a number and print its reverse.(using while loop)
15. WAP to read a number and sum of its digits(using while loop)
16. WAP to read a number and check whether its Armstrong or not.(using while loop)((Sum of xQube)=x. like153)
17. WAP to read a number and check whether it is Perfect or not.(using for loop)
18. WAP to read a number and check whether it is Palindrome or not.(using while loop)(121,474...)
19. WAP to read n number and find out maximum.(using do-while)
20. WAP to read to read a n digit number and print how much digits are available in the number.(using while and do-while)

## ARRAY

1. **Read an array and print sum of its elements.**
2. Read an array and print its reverse.
3. Read an array and count total no. of even and odd elements.
4. Read an array and find out max and second max.
5. Read an array and find out max and min.
6. Read an array and count total no. of +ve, -ve and zero elements.
7. Read an array and count no. of element which are divisible by 5.
8. Read an array and perform LINEAR Search.
9. Read an array and perform BINARY Search.
10. Read two array of same dimension and swap their elements.
11. Read two array of same dimension and swap their elements index by index into third.
12. Read an array and print it in ascending order.(SORTING)
13. Read an array and print sum of elements stored at even indexes.
14. Read an array and check whether its elements are stored In Palindrome form or not.
15. Read an array and find out how many elements are prime.
16. Read a 2D array and print sum of its elements.
17. Read a 2D array and print sum of its individual rows.
18. Read a 2D array and print sum of its individual columns.
19. Read a 2D array and print sum of its diagonal elements.
20. Read two 2D array and perform addition, subtraction and multiplication on these arrays, store result In third array and print it.
21. Read a 2D array and print its transpose.
22. Read a 3X3 array and convert it into 4X4 array by adding its row, column and diagonal elements.
23. Read a 2D array and find out maximum among each row.
24. Read a 2D array and find out maximum among its diagonal elements.
25. Read a 2D array and swap their elements.

## **STRING**

1. Read a string and count its length.
2. Read a string and count total no. of space and words.
3. Read a string and count total no of digit, space and special symbols.
4. Read a string and count total character and words.
5. Read a string and copy its contents into another.
6. Read a string and print its reverse.
7. Read two strings and perform concatenation.
8. Read two strings and compare them.
9. Read a string and convert upper case letter into lower case and lower case letter into upper case.
10. Read a string and capitalize first letter of each word.
11. Read a string and count occurrence of a particular character.
12. Read a string and print its characters in alphabetical order.
13. Read a string and print ASCII code of each character.
14. Read a string and check whether its palindrome or not.
15. Read a string and replace a particular character of string with another.
16. WAP to replace all white space of a line of text by \*.
17. WAP to print your name in Abbreviated form.(like. Naman Joshi -> N J)
18. WAP to remove all white space in a given line of text.
19. WAP to reverse a string in the following way.  
BOYS ARE BEST = BEST ARE BOYS
20. WAP to copy one string to another string up to specific length.
21. WAP to count vowels and consonants in a string.

## **STRUCTURE**

1. WAP to read information of 20 students and then print a list of students of a specific class given through input.
2. WAP to read information of 20 students and then print complete information of the topper among those 20 students.
3. WAP to read personal information about 10 people and then print the information people living in a particular city.
4. WAP to read information about 10 employees and sort the information according to emp\_id.
5. WAP to create a date structure. And increase date by any given no of days and date should be valid.
6. Design a structure 'distance' to store a length in feet and inches. Using this structure write a program that accepts two measurements from the user and print sum of these measurements. If inches are > 10 then convert it into feet.
7. Design a structure 'Complex' to model a complex no. WAP to add two complex no.
8. WAP to read information of 20 books and print the name and author names of books whose price is more than 500Rs.

## **FUNCTION AND POINTERS**

WAP for above mentioned problem on arrays strings and structure using functions and pointers.

You have to pass Array, Strings and Structures in function by CALL BY VALUE and CALL BY ADDRESS methods.

NOTE: - When we pass Arrays, String and Structures in function by CALL BY ADDRESS method then pointers are used.

## **FILE HANDLING**

1. WAP to create a file, write data into it and display it.
2. WAP to append data in a created file and display it.
3. WAP to copy one file into another.
4. WAP to count the no. of character in a file.
5. WAP to count no. of vowels, consonants and blank spaces in a file.
6. WAP to store name, address and phone no. in a file.
7. WAP to count no words from a file.
8. WAP to count no. of vowels and consonants in a file.
9. WAP to count total character from file including space and excluding spaces.
10. WAP to find out how many words starts from same character.