

### If programs:

1. Write a program using the if condition.  
Note: Pass **true as a boolean value** as input in if condition.  
Output: Should display If block is executed.
2. Write a program using IF condition.  
note: Pass **1** as input in if condition.  
Output: Should display If block of code is executed.
3. Write a program to print the given number as a Positive Value.  
Input: 2  
Output: Given Value is Positive.
4. Write a program to print the given number as an Even Number .  
  
Input:6  
Output: Given Number is Even
5. Write a program to print the given number as an Odd Number.  
Input : 3  
Output: Given Number is Odd
6. Write a program to print the person's age as Major/Minor.  
Input: 18  
Output: Major
7. Write a program to check that both the values are the same?  
Input: 20 && 20  
Output: Numbers are equal
8. Write a program to compare if both values are equal or not?  
Input: "abc" && "abc"  
Output: Strings are equal
9. Write a program using multiple If conditions to check greater than/less than/Equal to condition among 2 values.  
Input: a=10, b=15  
Output: a less than b
10. Write a program to check the percentage among 3 subjects.  
input : 80,80,80  
output: 80

### if-else program:

11. Write a program to check whether the given number is even or odd?

Input: 2    Output: Given number is Even

Input :3    Output: Given number is odd

12. Write a program with these values in if condition

1. If we pass 1 print true value.

2. If it is 0 print false value.

13. Write a program to check whether the given number is positive or negative?

Input: 2    Output: Given number is positive

Input : -3    Output: Given number is negative

14. Write a program to check whether the student is pass or fail based on marks given?

Input: 35    Output: Pass

Input: 34    Output: Fail

15. Write a program to check whether the given year is a leap year or not?

Input:2004    Output: Given year is leap year

Input:2003    Output: Given year is not a leap year.

16. Write a program using && in if condition, check the given number is divisible by 3 & 5.

Input: 15    Output: 15 is divisible by 3 & 5

Input: 18    Output: 18 is not divisible by 3 & 5.

17. Write a program to check the given alphabet is Vowel or consonant?

Input: a    Output: A is Vowel

Input : c    Output: C is consonant

18. Write a program to check the given person's age is major or minor?

Input: 18    Output: Given person age is major

Input:17    Output: Given age is minor

19. Write a program to check whether the given letter is in Uppercase/Lowercase?

Input: A    Output: A is in Uppercase

Input: b Output : b is in lowercase.

20. Write a program to calculate profit or loss?

Input: Cost of product : 1000, Spelling Price: 1500

Output: Profit is 500

If-else ladder:

21. write program to check whether a character is alphabet, digit or special character

input : hello

output : string

input : 978

output : Number

input : @

output : special character

22. write a program to check the maximum number among 3 numbers

input : a=20;b=30,c=35

output : c is maximum value

input: a = 10; b= 43; c=34

output : b is maximum value

input : a= 45;b =33; c = 21;

output : a is maximum value

23. Program to print days in a month using logical OR operator

input : 1

output : 31 days like that;

**24 .Write a program to input marks of five subjects Physics, Chemistry, Biology, Mathematics and Computer. Calculate percentage and grade according to following:**

Percentage  $\geq 90\%$  : Grade A

Percentage  $\geq 80\%$  : Grade B

Percentage  $\geq 70\%$  : Grade C

Percentage  $\geq 60\%$  : Grade D

Percentage  $\geq 40\%$  : Grade E

Percentage  $< 40\%$  : Grade F

25. Write a C program to input the basic salary of an employee and calculate gross salary according to given conditions.

Basic Salary  $\leq$  10000 : HRA = 20%, DA = 80%

Basic Salary is between 10001 to 20000 : HRA = 25%, DA = 90%

Basic Salary  $\geq$  20001 : HRA = 30%, DA = 95%

input : basic salary of employee : 22000

output : gross salary : 44000

26 . Write a program to enter week number and print day of week?

Take numbers from 1 to 7

Input : 3

Output : Tuesday

Input : 8

27. Print the metro stations based on ticket cost?

Input: Rs 10                      Output: miyapur to jntu

Input: Rs 20                      Output: miyapur to kukatpally

Input: Rs 30                      Output: miyapur to bharat nagar

Input: Rs 65                      Output: ticket cost is up to Rs 60 .

28. Print bike model based on bike mileages?

Input : 60                      Output: Grammar

Input: 40                      Output: Unicorn

Input: 34                      Output: Royal Enfield

Input: 80                      Output: Bajaj CT100

29. Write a program to print wishes based on time ?

Input :  $< 12$

Output : Good morning

Input :  $> 12$  and  $< 18$

Output : Good after noon

Input :  $> 18$  and  $< 24$

Output : Good night

### 30. Program to check equilateral, scalene or isosceles triangle

input : side 1 : 60

side 2 : 60

side 3 : 60

output : equilateral triangle

input : side 1 : 90

side 2 : 45

side 3 : 45

output : isosceles triangle

input : side 1 : 40

side 2 : 50  
side 3 : 90

output : scalene triangle

Nested-if:

31. Write a program to take user name and password and print username and password are correct or not

Static data:

Username : 'a'

Password: 123

Input:

User name: a

Password: 123

Output: Login successfully

Input:

User name : a

Password: 1234

Output: Password is incorrect try again

Input:

Username: b

Password: 123

Output: User name is incorrect try again

32. Print the biggest number among 4 numbers?

Input : a=10;b=25;c=30;d=5;      Output: "C" is the  
big number.

33. print the given vowel is small letter (or) capital letter?

Input: a

Output: small letter

Input: A

Output: capital letter

Input: b

Output: consonant

34. print the person is eligible for government job (Or) not? (based on age)

Input: age=17

Output: your age is below to work

Input:

age=25

Output

: your eligible for work

Input:

age=60

Output

: Your eligible to take pension.

35. Print the boy and girl is eligible for marriage?

Input: boy=18; girl=18

Output: both are eligible for marriage

Input: boy=18; girl=17

Output: boy is eligible for marriage

Input: boy=17; girl=18

Output: girl is eligible for marriage.

Input: boy=17; girl=17

Output: boy and girl is not eligible for

marriage

36. print the given number is even (Or) odd?

Input: 5

Output: odd number

Input: 6

Output: even number

Input: a

Output: not a number

37. print the person is eligible for donation of blood? (based on age and weight)

Input: age=18 and weight=50    Output: eligible for donation of blood

Input: age=18 and weight=48    Output: your weight is low so you are not eligible for donation of blood.

Input: age=17 and weight=52    Output: your age is below to donate blood

38. Print the true only when given inputs values and types are matched?

Input: a=10; b=10

Output: true

Input: a=10 ; b="10"

Output: false

### Switch

41. write a program to print as below format?

Input: 1

Output: the number is 1

Input: 2

Output: the number is 2

Input: 3

Output: the number is 3

Input: 5

Output: the value is more than 3.

42. Write a program to print a given letter as a vowel or consonant?

Input: a or A

Output: Vowel

Input: b or B

Output: Consonant

43. Write a program to print week days by using numbers (days should start from 0 index number)?

Input: 1	Output: Monday
Input: 7 above	Output: invalid day

44. Write a program to find how many days in months (if feb is leap year print 29 days)

Input: 2018 jan	Output: 31 days
Input: 2018 feb	Output: 28 days

45. Write a program to print operation between two numbers regarding operands? (simple calculator)

Input: 2 + 2	Output: 4
Input: 2 - 2	Output: 0
input : 2 * 2	output : 4
input : 2/2	output : 1

46. Write a program to print travel in the metro from where to where regarding ticket cost?

Input: 15	Output: Miyapur to Jntu
Input: 45	Output: Miyapur to Ameerpet
Input: 65	Output: Please check ticket costs

47. write a program to print the gender is male or female?

Input: m	Output: male
Input: F	Output: female
Input: g	Output: undefined.

48. write a program to print the percentage and grade of a student. (of 5 subjects)

Input: 90,90,90,90,90	Output: 90 percentage and "A" grade
Input: 40,40,40,40,40	Output: 40 percentage and improve the study

49. write a program to print the cost of a fruits?

Input: banana

Output: cost 5

Input: apple

Output: cost 10

50. write a program to print the cost a laptop?

Input: hp

Output: 35k

Input: dell

Output: 40k

For loop:

51. write a program to print 1 to 10 numbers ?

52. write a program to print 1 to n numbers ?

53. write a program to print 1 to n even numbers and odd numbers ?

54. write a program to print sum of 1 to n even numbers and odd numbers?

55. write a program to print sum of n even numbers?

56. write a program to print if a given number is prime or not ?

input : 3

output : given number is prime number

57. write a program to print 1 to n prime numbers ?

input : n = 10;

output : 2,3,5,7

58. write a program to print n prime numbers ?

input : n = 10;

output : 2,3,5,7,11,13,17,19,23,29

59. Write a program to print given number is perfect number or not?

Input : 28 output : given number is perfect number

60. Write a program print ★ in the below patter?

Input : 4

Output :     \* \* \* \*  
              \* \* \* \*  
              \* \* \* \*  
              \* \* \* \*

While:

61. Write a program to print numbers in reverse order 1 to n numbers?

input: 5 ; output : 5,4,3,2,1

62. Write a program to print factorial value based on given number?



input : 4 output : 24

63. Write a program to print the table based on given number?

64. Write a program to print the tables upto given number?

65. Write a program to print fibrosis series?

Enter the number : 10

Fibonacci Series: 0, 1, 1, 2, 3, 5, 8, 13, 21, 34

66. write a program to check whether the given number is Armstrong number or not

[Note : input number must only be 3 digits?]

input : 153 output : Armstrong number

input : 152 output : Not Armstrong number

67. print the star in the pattern below?

input : 5

output : \*

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68 write a program to print triangle?

Input: 4 Output :

\*

\* \*

\* \* \*

\* \* \* \*

69. Write a program to print Strong numbers?

A strong number is a number if the factorial of its digit is equal to the number itself.

**Eg: 145 is a strong number. Factorial of 145 is  $1! + 4! + 5! = 1 + 24 + 120 = 145$**

**70. Write a program to print squares?**

Do-while:

71. print the 1 to n prime numbers

72. print the number in below order

input ; 5 output : 11111

00000  
11111  
00000  
11111

73 print the number in below order

input : 5    output : 01010  
                  01010  
                  01010  
                  01010  
                  01010

74. Write a program to print exponential values based on base and exponential ?

input: base : 2    expo : 3                    output : 8 like that

75. Write a program to print sum of first number and last number

Input: 1234            output: 5

76 . write a program to print the given number in reverse order ?

Note : don't use the string data type

input : 456    output : 654

77. write a program to print given number is palindrome number are not ?

input : 121    output : given input is palindrome number

78. write a program to print the pattern below ?

input: 5            output : 1  
                          21  
                          321  
                          4321  
                          54321

79. write a program to print the pattern below ?

input : 5            output :  
1                    1  
2                    2  
3                    3  
4 4  
5  
4 4  
3                    3  
2                    2  
1                    1

Note : use input as odd number only to get star pattern

80. write a program to print like that ?

input : 10

output :

```
1 2 3 4 5 6 7 8 9 10
2 4 6 8 10 12 14 16 18 20
3 6 9 12 15 18 21 24 27 30
4 8 12 16 20 24 28 32 36 40
5 10 15 20 25 30 35 40 45 50
6 12 18 24 30 36 42 48 54 60
7 14 21 28 35 42 49 56 63 70
8 16 24 32 40 48 56 64 72 80
9 18 27 36 45 54 63 72 81 90
10 20 30 40 50 60 70 80 90 100
```

Arrays:

81. Write a program to print array elements.

Suppose take one Array `a[]={1,2,3,4,5,6,7}`; (Take Array elements Dynamically.)

Just print that Array elements.

Output: 1 2 3 4 5 6 7.

82. Write a program to print even numbers and odd numbers in an array?

Suppose take one Array `a[]={1,2,3,4,5,6,7}`; (Take Array elements Dynamically.)

Output:

Even numbers are: 2, 4, 6

Odd numbers are: 1, 3, 5, 7

83. Write a program to print array elements in reverse order?

Suppose take one Array `a[]={1,2,3,4,5,6,7}`; (Take Array elements Dynamically.)

Output: 7, 6, 5, 4, 3, 2, 1

84. Write a program to print array elements in ascending order in a for loop by using functions.

input :Array[]={3,1,8,45,2,90,7,12,5};(Take Array elements Dynamically.)

Output:Ascending order is:1,2,3,5,7,8,12,45,90.

85. Write a program to print array elements in descending order in for loop by using functions.

input :Array[]={3,1,8,45,2,90,7,12,5};(Take Array elements Dynamically.)

Output: Descending order is:90,45,12,8,7,5,3,2,1

86. Write a program to find the minimum and maximum elements in an array in a for loop by using functions.

input :Array[]={3,1,8,45,2,90,7,12,5};(Take Array elements Dynamically.)

Output:

Minimum element of an Array is:1

Maximum element of an Array is:90.

87. Write a program to find Duplicate elements in an array in for loop by using functions.

input :Array[]={3,4,5,6,7,2,2,1,10,12,10,15,16,17,3,3};

output: Duplicate elements are:3,2,10

88. Write a program to find Common elements between two arrays of integers in for loop by using functions.

input :Array1[]={1,2,3,4,5,6,7,8,9,3,5,6,90};

Array2[]={5,3,12,34,90,5,1,2,4};

Output: Common elements between two arrays:1,2,3,4,5,90

89. write a program to print common elements between two arrays(in Strings)

Input:

arr1=["cat", "bat", "rat"]

arr2=["hat", "rat", "sweet"]

OUTPUT:

common elements between two arrays:rat

90. write a program to merge two array elements

Input:

arr1=[10,20,30]

arr2=[40,50,60]

output:

arr=[10,20,30,40,50,60]

91.write a program to print non repeated array elements

Input:

arr1=[1,2,3,1,5]

output:

Non Repeated array elements are :2,3,5

92. write a programs to print the missing elements in the given range in an array ?

Input : Range 1 to 25

input : 2,5,8,1,4,7,22,25,23

Output : Missing elements are : 1,3,4,6,9,10,11,12,13,14,15,16,17,18,19,20,21,24.

93. write a program to print first and second non repeated array elements ?

Input : 2,3,3,5,6,5

Output : First non repeated element : 2  
second non-repeated element :6

94.write a program to print and find the length of A STRING in a given array ?

input : ["html","css","javascript","node"]

output : html - 4  
css -3  
javascript - 9  
node - 4

95. write a program to print string elements of an array in ascending order(based on length of a string) in a given array ?

input : ["html","css","javascript","node"]

output : css,html,node,javascript

97.write a program to print reverse the string in an given array ?

input : [java,HTML]

output: [avaJ,LMTH]

98.write a program to print left rotate of an array values ?

input : original Array values are :2,9,3,4,7

input : left rotate : 2

output : 3,4,7,2,9

99.Write a program to print ascending order of even and odd elements of an array in for loop by using functions.

input :Array[]={3,1,8,45,2,90,7,12,5};(Take Array elements Dynamically.)

Output:

Even elements are:2,8,12,90

Odd elements are:1,3,5,7,45