

5

1. Write a C program to print your name, date of birth, and mobile number.
2. Write a C program to compute the perimeter and area of a rectangle with a height of 7 inches and width of 5 inches.
(Formula of perimeter $2x + 2y$ and formula of area $x*y$)
3. Write a C program to compute the perimeter and area of a circle with a given radius. (Perimeter = $2\pi r$ and Area = πr^2)
4. Write a C program to convert specified days into years, weeks and days.
Test Data :
Number of days : 1329
Expected Output :
Years: 3
Weeks: 33
Days: 3
5. Write a C program that accepts two integers from the user and calculates the sum of the two integers.
6. Write a C program that accepts two integers from the user and calculates the product of the two integers.
7. Write a C program that accepts an employee's ID, total worked hours in a month and the amount he received per hour. Print the ID and salary (with two decimal places) of the employee for a particular month.
Test Data :
Input the Employees ID(Max. 10 chars): 0342
Input the working hrs: 8
Salary amount/hr: 15000
Expected Output:
Employees ID = 0342
Salary = US\$ 120000.00
8. Write a C program that accepts three integers and finds the maximum of three.
Test Data :
Input the first integer: 25
Input the second integer: 35
Input the third integer: 15
Expected Output:
Maximum value of three integers: 35
9. Write a C program to convert a given integer (in seconds) to hours, minutes and seconds.
Test Data :
Input seconds: 25300
Expected Output:
There are:
H:M:S - 7:1:40
10. Write a C program that accepts 4 integers p, q, r, s from the user where q, r and s are positive and p is even. If q is greater than r and s is greater than p and if the sum of r and s is greater than the sum of p and q print "Correct values", otherwise print "Wrong values".
Test Data :
Input the second integer: 35
Input the third integer: 15
Input the fourth integer: 46
Expected Output:
Wrong values
11. Write a C program that reads 5 numbers and sums all odd values between them.
Test Data :
Input the first number: 11
Input the second number: 17
Input the third number: 13
Input the fourth number: 12

Input the fifth number: 5

Expected Output:

Sum of all odd values: 46

12. Write a C program that reads two integers and checks whether they are multiplied or not.

Test Data :

Input the first number: 5

Input the second number: 15

Expected Output:

Multiplied!

13. Write a C program that reads an integer between 1 and 12 and prints the month of the year in English.

Test Data :

Input a number between 1 to 12 to get the month name: 8

Expected Output:

August

14. Write a C program that prints all even numbers between 1 and 50 (inclusive).

Test Data :

Even numbers between 1 to 50 (inclusive):

Expected Output:

2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50

15. Write a C program that reads 5 numbers and counts the number of positive numbers and negative numbers.

Test Data :

Input the first number: 5

Input the second number: -4

Input the third number: 10

Input the fourth number: 15

Input the fifth number: -1

Expected Output:

Number of positive numbers: 3

Number of negative numbers: 2

16. Write a C program that reads 5 numbers, counts the number of positive numbers, and prints out the average of all positive values.

Test Data :

Input the first number: 5

Input the second number: 8

Input the third number: 10

Input the fourth number: -5

Input the fifth number: 25

Expected Output:

Number of positive numbers: 4

Average value of the said positive numbers: 12.00

17. Write a C program to find and print the square of all the even values from 1 to a specified value.

Test Data :

List of square of each one of the even values from 1 to a 4 :

Expected Output:

$2^2 = 4$

$4^2 = 16$

18. Write a C program to check whether a given integer is positive even, negative even, positive odd or negative odd. Print even if the number is 0.

Test Data :

Input an integer: 13

Expected Output:

Positive Odd

19. Write a C program to print all numbers between 1 and 100 which are divided by a specified number and the remainder will be 3.

Test Data :

Input an integer: 25

Expected Output:

3
28
53
78

20. Write a C program that accepts some integers from the user and finds the highest value and the input position.

Test Data :

Input 5 integers:

5
7
15
23
45

Expected Output:

Highest value: 45

Position: 5

21. Write a C program to read a password until it is valid. For wrong password print "Incorrect password" and for correct password print, "Correct password" and quit the program. The correct password is 1234.

Test Data :

Input the password: 1234

Expected Output:

Correct password

22. Write a program that reads two numbers and divides the first number by the second number. If division is not possible print "Division is not possible".

Test Data :

Input two numbers:

x: 25

y: 5

Expected Output: 5.0

23. Write a C program to return the quotient and remainder of a division.

24. Write a C program to perform addition, subtraction, multiplication and division of two numbers.

Expected Output :

Input any two numbers separated by comma : 10,5

The sum of the given numbers : 15

The difference of the given numbers : 5

The product of the given numbers : 50

The quotient of the given numbers : 2.000000

25. Write a program that converts Centigrade to Fahrenheit.

Expected Output :

Input a temperature (in Centigrade): 45,

113.000000 degrees Fahrenheit.

$$C = (5/9) * (F - 32)$$

26. Write a C program to accept two integers and check whether they are equal or not.

27. Write a C program to check whether a given number is even or odd.

28. Write a C program to check whether a given number is positive or negative.

29. Write a C program to find whether a given year is a leap year or not.

30. Write a C program to accept the height of a person in centimeters and categorize the person according to their height.

■ Height < 150 Dwarf

Height = 150 average height

Height ≥ 165 Tall

Test Data : 135

Expected Output :

The person is Dwarf.

31. Write a C program to determine eligibility for admission to a professional course based on the following criteria:

Eligibility Criteria : Marks in Maths ≥ 65 and Marks in Phy ≥ 55 and Marks in Chem ≥ 50 and Total in all three subject ≥ 190 or Total in Maths and Physics ≥ 140

Test data:

Input the marks obtained in Physics :65

Input the marks obtained in Chemistry :51

Input the marks obtained in Mathematics :72

Total marks of Maths, Physics and Chemistry : 188

Total marks of Maths and Physics : 137

Expected Output :

The candidate is not eligible for admission.

32. Write a C program to read temperature in centigrade and display a suitable message according to the temperature state below:

Temp < 0 then Freezing weather

Temp 0-10 then Very Cold weather

Temp 10-20 then Cold weather

Temp 20-30 then Normal in Temp

Temp 30-40 then Its Hot

Temp ≥ 40 then Its Very Hot

Test Data :

42

Expected Output :

Its very hot.

33. Write a C program to check whether a triangle is Equilateral, Isosceles or Scalene. (Equilateral triangle: An equilateral triangle is a triangle in which all three sides are equal. Isosceles triangle: An isosceles triangle is a triangle that has two sides of equal length. Scalene triangle: A scalene triangle is a triangle that has three unequal sides)

Test Data :

50 50 60

Expected Output :

This is an isosceles triangle.

34. Write a C program to check whether a triangle can be formed with the given values for the angles. (Check whether sum=180 then its a valid triangle otherwise not)

Test Data :

40 55 65

Expected Output :

The triangle is not valid.

35. Write a C program to check whether a character is an alphabet, digit or special character.

36. Write a C program to check whether an alphabet is a vowel or a consonant.

37. Write a program in C to calculate and print the electricity bill of a given customer. The customer ID, name, and unit consumed by the user should be captured from the keyboard to display the total amount to be paid to the customer.

The charge are as follow :

Unit	Charge/unit
upto 199	@1.20
200 and above but less than 400	@1.50
400 and above but less than 600	@1.80
600 and above	@2.00

If bill exceeds Rs. 400 then a surcharge of 15% will be charged and the minimum bill should be of Rs. 100/-

Test Data :

1001

James

800

Expected Output :

Customer IDNO :1001

Customer Name :James

unit Consumed :800

Amount Charges @Rs. 2.00 per unit : 1600.00

Surcharge Amount : 240.00

Net Amount Paid By the Customer : 1840.00

38. Write a program in C to accept a grade and declare the equivalent description :

Grade	Description
E	Excellent
V	Very Good
G	Good

A

Average

F

Fail

Test Data :

Input the grade :A

Expected Output :

You have chosen : Average

39. Write a C program to read any day number in integer and display the day name in word format.

Test Data :

4

Expected Output :

Thursday

40. Write a program in C to read any digit and display it in the word.

Test Data :

4

Expected Output :

Four

41. Write a C program for reading any Month Number and displaying the Month name as a word.

Test Data :

4

Expected Output :

April

42. Write a program in C to read any Month Number in integer and display the number of days for this month.

Test Data :

7

Expected Output :

Month have 31 days

43. Write a program in C to display the first 10 natural numbers.

Expected Output :

1 2 3 4 5 6 7 8 9 10

44. Write a C program to compute the sum of the first 10 natural numbers.

Expected Output :

The first 10 natural number is :

1 2 3 4 5 6 7 8 9 10

The Sum is : 55

45. Write a program in C to display n terms of natural numbers and their sum.

Test Data : 7

Expected Output :

The first 7 natural number is :

1 2 3 4 5 6 7

The Sum of Natural Number upto 7 terms : 28

46. Write a program in C to display the cube of the number up to an integer.

Test Data :

Input number of terms : 5

Expected Output :

Number is : 1 and cube of the 1 is :1

Number is : 2 and cube of the 2 is :8

Number is : 3 and cube of the 3 is :27

Number is : 4 and cube of the 4 is :64

Number is : 5 and cube of the 5 is :125

47. Write a program in C to display the multiplication table for a given integer.

Test Data :

Input the number (Table to be calculated) : 15

Expected Output :

15 X 1 = 15

...

...

15 X 10 = 150

48. Write a program in C to display the multiplier table vertically from 1 to n.

Test Data :

Input upto the table number starting from 1 : 8

Expected Output :

Multiplication table from 1 to 8

1x1 = 1, 2x1 = 2, 3x1 = 3, 4x1 = 4, 5x1 = 5, 6x1 = 6, 7x1 = 7, 8x1 = 8

...

1x10 = 10, 2x10 = 20, 3x10 = 30, 4x10 = 40, 5x10 = 50, 6x10 = 60, 7x10 = 70, 8x10 = 80

49. Write a program in C to store elements in an array and print them.

Test Data :

Input 10 elements in the array :

element - 0 : 1

element - 1 : 1

element - 2 : 2

.....

Expected Output :

Elements in array are: 1 1 2 3 4 5 6 7 8 9

50. Write a program in C to read n number of values in an array and display them in reverse order.

Test Data :

Input the number of elements to store in the array :3

Input 3 number of elements in the array :

element - 0 : 2

element - 1 : 5

element - 2 : 7

Expected Output :

The values store into the array are :

2 5 7

The values store into the array in reverse are :

7 5 2