**Question 1.**

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| Write a C program to find the largest of three numbers. | | |
| Test Data: 12 25 52  Expected Output:  1st Number = 12, 2nd Number = 25, 3rd Number = 52  The 3rd Number is the greatest among three | | |
| **Question 2.**  Suppose that score is a variable of type double. Write the c statement that increases the score by 5 marks if score is between 80 and 90.  **Question 3.** | | |
| A shop will give discount of 10% if the cost of purchased quantity is more than 1000. Ask user for quantity. Suppose, one unit will cost 100. Judge and print total cost for user.  **Question 4.**  Write a program to read in numbers until the number -999 is encountered. The sum of all number read until this point should be printed out.  **Question 5.**  Read a positive integer value and compute the following sequence: If the number is even, halve it; if it's odd, multiply by 3 and add 1. Repeat this process until the value is 1, printing out each value. Finally print out how many of these operations you performed.  Sample output:  Inital value is 9  Next value is 28  Next value is 14  Next value is 7  Next value is 22  Next value is 11  Next value is 34  Next value is 17  Next value is 52  Next value is 26  Next value is 13  Next value is 40  Next value is 20  Next value is 10  Next value is 5  Next value is 16  Next value is 8  Next value is 4  Next value is 2  Final value 1, number of steps 19  If the input value is less than 1, print a message containing the word  Error  and perform an  exit(0); |  |
| **Question 6.**  Write a program to print following:   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  | | | | | | | **i)** | \*\*\*\*\*\*\*\*\*\* \*\*\*\*\*\*\*\*\*\* \*\*\*\*\*\*\*\*\*\* \*\*\*\*\*\*\*\*\*\* | **ii)** | \* \*\* \*\*\* \*\*\*\* \*\*\*\*\* | **iii)** | \*       \*\*     \*\*\*   \*\*\*\* \*\*\*\*\* | | **iv)** | \*       \*\*\*     \*\*\*\*\*   \*\*\*\*\*\*\* \*\*\*\*\*\*\*\*\* | **v)** | **1       222     33333   4444444 555555555** | **vi)** | **1       212     32123   4321234 543212345** |   **Question 7**  Create an array that can hold ten integers, and get input from user. Display those values on the screen, and then prompt the user for an integer. Search through the array, and count the number of times the item is found.  **Question 8**  Write a program to find the second largest number in the array.  **Question 9**  Write a program to search the array for any specific number.  **Question 10**  Write a program to sort an integer array in ascending form. | | |  |

**Question 11.**

Take two 3x3 2D-Arrays as input from the user and show the addition and subtraction of the matrices.

**Question 12.**

Take a 3x2 and a 3x3 2D-Array as input from the user and show the multiplication of the matrices.

**Question 13.**

Write a program in C to print individual characters of string in reverse order.

Test Data :  
Input the string : w3resource.com

*Expected Output* :

The characters of the string in reverse are :

m o c . e c r u o s e r 3 w

**Question 14.**

Write a program in C to count the total number of words in a string.

Test Data :  
Input the string : This is w3resource.com

*Expected Output* :

Total number of words in the string is : 3

**Question 15.**

Write a program in C to count total number of alphabets, digits and special characters in a string.

Test Data :  
Input the string : Welcome to w3resource.com

*Expected Output* :

Number of Alphabets in the string is : 21

Number of Digits in the string is : 1

Number of Special characters in the string is : 4

**Question 16.**

Write a program in C to count total number of vowel or consonant in a string.

Test Data :  
Input the string : Welcome to w3resource.com

*Expected Output* :

The total number of vowel in the string is : 9

The total number of consonant in the string is : 12

**Question 17.**

Write a program in C to find maximum occurring character in a string.

Test Data :  
Input the string : Welcome to w3resource.com.

*Expected Output* :

The Highest frequency of character 'e'

appears number of times : 4