

Accenture Coding Questions

The following is a compilation of the type of Accenture coding questions that you'd be encountering.

1. Execute the given function.

```
def differenceofSum(n,m)
```

The function takes two integers m and n as arguments. You are required to obtain the total of all integers ranging between 1 to n (both inclusive) which are not divisible by m . You must also return the distinction between the sum of integers not divisible by m with the sum of integers divisible by m .

Assumption

$m > 0$ and $n > 0$

Sum lies within the integral range

Example

Input:

$m = 6$

$n = 30$

Output:

285

Integers divisible by 6 are 6, 12, 18, 24, and 30. Their sum is 90.

Integers that are not divisible by 6 are 1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 13, 14, 15, 16, 17, 19, 20, 21, 22, 23, 25, 26, 27, 28, and 29. Their sum is 375.

The difference between them is 285 ($375 - 90$).

Sample input:

$m = 3$

$n = 10$

Sample output:

19

2. Execute the given function.

```
def LargeSmallSum(arr)
```

The function takes an integral arr which is of the size or length of its arguments. Return the sum of the second smallest element at odd position $?arr?$ and the second largest element at the even position.

Assumption

Every array element is unique.

Array is 0 indexed.

Note:

If the array is empty, return 0.

If array length is 3 or <3 , return 0.

Example

Input:

Arr: 3 2 1 7 5 4

Output:

7

Explanation

The second largest element at the even position is 3.

The second smallest element at the odd position is 4.

The output is 7 (3 + 4).

3. Write a function to validate if the provided two strings are anagrams or not. If the two strings are anagrams, then return ?yes?. Otherwise, return ?no?.

Input:

Input 1: 1st string

Input 2: 2nd string

Output:

(If they are anagrams, the function will return ?yes?. Otherwise, it will return ?no?.)

Example

Input 1: Listen

Input 2: Silent

Output:

Yes

Explanation

Listen and Silent are anagrams (an anagram is a word formed by rearranging the letters of the other word).

Also Read About - Difference between argument and parameter

Accenture Coding Questions in Python

4. Perform the following function.

```
def Productsmallpair(sum,arr)
```

This function accepts the integers sum and arr. It is used to find the arr(j) and arr(k), where $k \neq j$. arr(j) and arr(k) should be the smallest elements in the array.

Keep this in mind:

If $n < 2$ or empty, return -1.

If these pairs are not found, then return to zero.

Make sure all the values are within the integer range.

Example

Input:

Sum: 9

Arr: 5 4 2 3 9 1 7

Output:

2

Explanation

From the array of integers, we have to select the two smallest numbers, i.e 2 and 1. Sum of these two $(2 + 1) = 3$. This is less than 9 $(3 < 9)$. The product of these two is 2 $(2 \times 1 = 2)$ Hence the output is integer 2.

Sample input:

Sum: 4

Arr: 9 8 7 3 9 3

Sample output:

7

5. Perform the function for the given purpose.

For writing numbers, there is a system called N-base notation. This system uses only N-based

symbols. It uses symbols that are listed as the first n symbols. Decimal and n-based notations are 0:0, 1:1, 2:2, ..., 10:A, 11:B, ..., 35:Z.

Perform the function: Chats DectoNBase(int n, int num)

This function only uses positive integers. Use a positive integer n and num to find out the n-base that is equal to num.

Steps

Select a decimal number and divide it by n. Consider this as an integer division.

Denote the remainder as n-based notation.

Again divide the quotient by n.

Repeat the above steps until you get a 0 remainder.

The remainders from last to first are the n-base values.

Assumption

$$1 < n \leq 36$$

Example

Input:

N: 12

Num: 718

Output:

4BA

Explanation

num	Divisor	Quotient	Remainder
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718	12	59	10(A)
-----	----	----	-------

59	2	4	11(B)
----	---	---	-------

4	12	0	4(4)
---	----	---	------

Sample input:

N: 21

Num: 5678

Sample output:

C18

6. Execute the function for the given purpose.

When the sum of the digits exceeds a total of 9, a carry digit is added to the right-left of the digit.

Execute the function: Int Numberofcarry(Integer num 1, Integer num 2)

Assumption

num1, num2 > = 0

Example

Input:

num1: 451

num2: 349

Output:

2

Explanation

When we add these two numbers from the right to the left, we get two carries. The value of each of the carries is 1. Hence, the output is the total of these two carries, i.e., 2.

Sample input:

num1: 23

num2: 563

Sample output:

0

7. The given function has a string (str) and two characters, ch1 and ch2. Execute the function in such a way that str returns to its original string, and all the events in ch1 are replaced by ch2, and vice versa.

Replacecharacter(Char str1, Char ch1, Int 1, Char ch2)

Assumption

This string has only alphabets that are in lower case.

Example

Input:

str: apples

ch1: a

ch2: p

Output:

paaales

Explanation

All the 'a' in the string is replaced with 'p'. And all the 'p's are replaced with 'a'.

Accenture Coding Questions In Java

8. Perform the function: `Int operationchoices(int c, int n, int a, int b)`. This function considers three positive inputs of a, b and c.

Execute the function to get:

$(a + b)$, if $c = 1$

(a / b) , if $c = 4$

$(a \> b)$, if $c = 2$

$(a \times b)$, if $c = 3$

Example:

Input:

a: 12

b: 16

c: 1

Output:

28

Explanation

$C = 1$, hence the function is $(a + b)$. Hence, the output is 28.

Sample input:

a: 16

b: 20

c: 2

Sample output:

4

9. Perform the function `Int calculate(int m, int n)`. This function needs two positive integers. Calculate the sum of numbers between these two numbers that are divisible by 3 and 5.

Assumption

$m > n \geq 0$

Example

Input:

m: 12

n: 50

Output:

90

Explanation

The numbers between 12 and 50 that are divisible by 3 and 5 are 15, 30, and 45. The sum of these numbers is 90.

Sample input:

m: 100

n: 160

Sample output:

405

10. Execute the function for the given purpose.

Create a matrix and mention the elements in it. Now, divide the main matrix into two halves in such a way that the elements in index 0 are even, the elements in index 1 are odd, and so on.

Then arrange the values in ascending order for even and odd. After this, calculate the sum of the second largest numbers from both even and odd matrices.

Example

The size of the array is 5.

Element at 0 index: 3

Element at 1 index: 4

Element at 2 index: 1

Element at 3 index: 7

Element at 4 index: 9

Even array: 1,3,9

Odd array: 4,7

Accenture Coding Questions in C

11. The binary number system only uses two digits 1 and 0.

Perform the function: `Int OperationsBinarystring(char* str)`

Assumptions

Return to ?1 if str is null.

The str is odd.

Example:

Input:

Str: ICOCICIAOBI

Output:

1

Explanation

The input when expanded is ?1 XOR 0 XOR 1 XOR 1 XOR 1 AND 0 OR 1?. The result becomes 1 and hence the output is 1.

12. Perform the function Checkpassword (char str[], int n)

Execute the function which happens to be 1 if the str is a valid password or it remains 0.

Conditions for a valid password:

The password should have at least 4 characters.

It should have at least 1 digit.

It should have one capital letter.

It should not have any spaces or obliques (/).

The first character should not be a number.

Assumption

The input is not empty.

Example

Input:

aA1_67

Output:

1

13. Execute this function Void MaxInArray(int arr[], int length)

This function helps in finding the maximum element in the array. Execute this function to print the

maximum element in the array with its index.

Assumptions

The index in the array for all the elements starts at 0.

The maximum element is in a different line in the output.

There has to be only one maximum element.

The function prints only what is required.

Example

Input:

23 45 82 27 66 12 78 13 71 86

Output:

86

9

Explanation

The maximum element is 86 and the array is 9.

14. Change frequent character

The function to execute is

ChangeFrequentCharacter(Char str, char x)

This function has a string and a character. This function requires replacing the most used character

in the str with the ?x? character.

Note: If two characters have the same frequency, then we will have to consider the frequency which has the lower ASCII value.

Example

Input:

str: bbadbbababb

char x: t

Output:

ttadttatatt

Explanation

The maximum character repeated is ?b? that is replaced with ?t?.

Also read, [Software Testing](#)

15. Execute the function Def Autocount(n).

The function accepts the string n. It checks whether the number is an autobiographical number or not. If an integer returns, then it is an autobiographical number. If 0 returns, then it is not an autobiographical number.

Assumption

The input value should not be more than 10 characters.

The input string will have numeric characters.

Example

Input:

N: ?1210?

Output:

3

Explanation

The 0th position has the number 1, the 1st position has the number 2, the 2nd position has the number 1, and the 3rd position has number 0. Hence, it is an autobiographical number.

The count of autobiographical numbers in the input is 3, hence 3 is returned.

[Click here to learn about, Html interview questions](#)

16. In a given list of integers, find the number that has the highest frequency. If there are one or more such numbers, give the smaller one as output.

Input:

3

7

2 4 5 2 3 2 4

6

1 2 1 1 2 1

10

1 1 1 1 1 1 1 1 1 1

Output:

2

1

1

17. Execute the function for the given purpose.

Write a function `mergeArrays` which merges two sorted arrays to create one single sorted array.

Complete the function `int* mergeArrays(int a[], int b[], int asize, int bsize)` below which takes the pointers to the first element of the two sorted arrays and the size of the arrays, and returns the base address of the final sorted array.

Input:

4 // Size of 1st array

1 2 3 6 // Elements of 1st array

3 // Size of 2nd array

4 5 7 // Elements of 2nd array

Output:

1

2

3

4

5

6

7

18. Create web access management to the kth largest number. It will accept an integer k and an array arr as its conditions and has to return the greatest element based on the value of k. That is, if k = 0, return the greatest element. If k = 1, return the second greatest element, and so on.

Example

Suppose the array contains values like {74, 85, 102, 99, 101, 56, 84} and the integer k is 2. The method will return 99, the third greatest element, as there are only two (according to the value of k) values greater than 99 (101 and 102).

19. We have mentioned a list of integers that have no duplicates. Find how many swaps it will take to sort the list in ascending order using Bubble sort.

Input:

3

5

2 1 4 6 3

10

123 21 34 45 25 675 23 44 55 900

1

23

Output:

3

16

0

20. Write a program to count the number of swaps required to sort a given list of integers in ascending order using the selection sort algorithm.

Input:

2

3

4 2 5

5

10 11 8 7 1

Output:

1

3

21. Form an array of 1000 integers and find out the second-largest number. If there is no second largest number, return the value to ?1.

Example

Input 1:

3

Input 2:

{2,1,2}

Output:

1

Explanation

The integer 1 is the second largest in the array.

Example

Input 1:

5

Input 2:

{4,7,9,8,0}

Output:

8

22. Adam decides to do some charity work. From day 1 till day n , he will give i^2 coins to charity. On day i ? ($1 \leq i \leq n$), find the number of coins he gives to charity.

Example 1

Input:

2

Output:

5

Explanation:

There are 2 days.

Example 2

Input:

3

Output:

14

23. Perform a function to reverse a string word-wise. The input here will be the string. In the output, the last word mentioned should come as the first word and vice versa.

Example

Input:

Welcome to code

Output:

code to Welcome

Explanation

The Reversed string word wise function is applied.

Example

Input:

Code to Crack Puzzle

Output:

Puzzle Crack to Code

24. Find the sum of the divisors for the N integer number.

Example 1

Input:

6

Output:

12

Explanation

Divisors of 6 are 1, 2, 3, and 6. The sum of these numbers is 12.

Example 2

Input:

36

Output:

91

25. Execute a function that accepts the integer array of length ?size? and finds out the maximum number that can be formed by permutation.

Note: You will have to rearrange the numbers to make the maximum number.

Example

Input:

34 79 58 64

Output:

98765443

Explanation

All digits of the array are 3, 4, 7, 9, 5, 8, 6, and 4. The maximum number found after rearranging all the digits is 98765443.

26. Find a string of a length of 1000 for a large number. Output is the modulo of 11. The output specification is to return the remainder modulo 11 of the input.

Input:

121

Output:

0

Explanation

$$121 \bmod 11 = 0$$

27. Find out if the given set of points are on a straight line or not. If the points are on a straight line, then return the equation. If not, then return 0.

Example

Input:

3

1 1 2 2 3 3

Output:

$$1x + 1y = 0$$

Explanation

The three points here are [1,1], [2,2], and [3,3]. These lie on a line, so the function returned the equation.

28. Write a function to find roots of a quadratic equation $ax^2 + bx + c = 0$.

Note: The formula to find the roots of a quadratic equation is given below:

Example

Input 1: 1

Input 2: -2

Input 3: 3

Output:

{3.0,?1.0}

Explanation:

On substituting the values of a, b, and c in the formula, the roots will be as follows:

$$+X = 3.0$$

$$-X = ?1.0$$

29. Write a function to find if the given string is a palindrome or not. Return 1 if the input string is a palindrome, else return 0.

Input:

level

Output:

1

Explanation:

The reverse of the string ?level? is ?level?. As they are the same, the string is a palindrome.

30. Write a function to check if the given two strings are anagrams or not. Return ?Yes? if they are anagrams, otherwise, return ?No?.

Example

Input 1: build

Input 2: dubli

Output:

Yes

