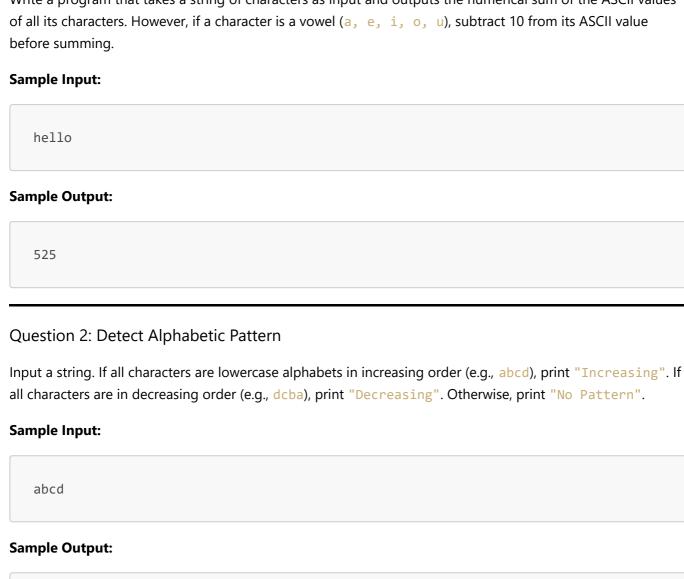
Increasing

C++ Control Statements Problems (String Version)

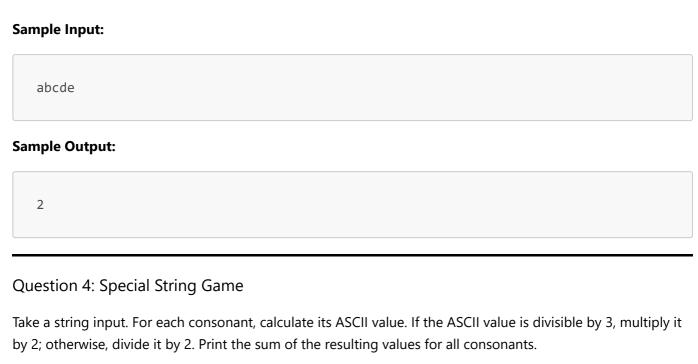
Question 1: Character-to-Number Translation

Write a program that takes a string of characters as input and outputs the numerical sum of the ASCII values



Question 3: Word Length Evaluation

Input a string of characters (no spaces). Count how many times the word length is greater than its first character's ASCII value modulo 5. Print the count.



Sample Input:

hello

Sample Output:

177

Question 5: Convert Vowels to Codes

Write a program that replaces vowels in a string with specific numbers:

• a -> 1, e -> 2, i -> 3, o -> 4, u -> 5

Any other character remains unchanged. Use control statements to implement this.

Sample Input:

apple

Sample Output:

1pp12

Question 6: Hidden Palindrome Check

Take a string input. If the first three characters and the last three characters of the string (in reverse order) are identical, print "Hidden Palindrome". Otherwise, print "Not Palindrome".

Sample Input:

abcrabc

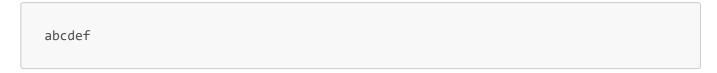
Sample Output:

Hidden Palindrome

Question 7: Two-Part String Transformation

Take a string input. If the string's length is even, print the characters in odd positions. If it's odd, print the reverse of the even-position characters.

Sample Input:



Sample Output:

ace

Question 8: Character Categories

Input a string. Count how many characters fall into these categories:

- Uppercase letters
- Lowercase letters
- Digits
- Special symbols Print the counts in a formatted way.

Sample Input:

Hello123!@

Sample Output:

Uppercase: 1 Lowercase: 4 Digits: 3 Special: 2

Question 9: Rotating String

Take a string and an integer k. Rotate the string k times:

• For every rotation, move the first character to the end. Use a for loop for this.

Sample Input:

abcde 2

Sample Output:

cdeab

Question 10: Case Conversion Challenge

Input a string. Use only if statements to:

- Convert lowercase letters to uppercase.
- Convert uppercase letters to lowercase. Print the resulting string.

Sample Input:

HeLLo

Sample Output:

hE110

Question 11: Character Triangle

Input a string of length greater than 3. Use nested loops to print:

Example (input = "code")



Sample Input:

```
code
```

Sample Output:

```
c
co
cod
code
```

Question 12: Even-Odd ASCII Counter

Input a string. Count how many characters have ASCII values that are even and how many are odd. Print both counts.

Sample Input:

```
abc
```

Sample Output:

```
Even: 1
Odd: 2
```

Question 13: First and Last Character Game

Take a string input. If the first and last characters are the same, count and print how many vowels exist in the string. Otherwise, count and print the consonants.

Sample Input:

abca

Sample Output:

Vowels: 2

Question 14: ASCII Sum Game

Input a string and a number x. Check whether the sum of ASCII values of all characters is divisible by x. Print "Yes" or "No".

Sample Input:

abc 6

Sample Output:

No

Question 15: Matching Brackets

Input a string containing only characters (and). Check if every opening bracket has a corresponding closing bracket. Print "Balanced" or "Not Balanced".

Sample Input:

(()())

Sample Output:

Balanced

Question 16: Conditional Character Swapping

Input a string. If the string contains more than three vowels, swap the first character with the last character and print the result. Otherwise, print the original string reversed.

Sample Input:

hello

Sample Output:

oellh

Question 17: Consecutive Character Difference

Input a string. Calculate the absolute difference in ASCII values of consecutive characters. If the sum of these differences is even, print "Even Differences". Otherwise, print "Odd Differences".

Sample Input:

abc

Sample Output:

Even Differences

Question 18: Repeating Character Counter

Take a string as input. Count how many characters appear more than once in the string, without using arrays or maps. Print the count.

Sample Input:

aabbcc

Sample Output:

3

Question 19: Mirror Character Conversion

Input a string. For every character, replace it with its mirror in the alphabet:

• a <-> z, b <-> y, c <-> x, etc. Print the converted string.

Sample Input:

abcz

Sample Output:

zyxw

Question 20: Longest Character Streak

Input a string. Find and print the longest streak of consecutive repeated characters. For example:

Sample Input:

aabbcccaaa

Sample Output:

Longest streak is 3 (c)