PYTHON

QUESTIONS

If-Else Questions

1. Accept two numbers and print the greatest between them.
2. Accept the gender from the user as char and print the respective greeting message. (Example: Good Morning Sir/Madam)
3. Accept an integer and check whether it is an even number or odd.
4. Accept name and age from the user. Check if the user is a valid voter or not.
5. Accept a year and check if it is a leap year or not.
6. Accept an English alphabet from the user and check if it is a consonant or a vowel.

Loop Questions

1. How to print natural numbers up to a given number 'n' using a loop?
2. How to modify a loop to print numbers in reverse order, from 'n' to 1?
3. How would a loop be written to print the multiplication table of a given number up to 10 terms?
4. How can the sum of a series of numbers up to a given term 'n' be calculated using a loop?
5. How to calculate the factorial of a number using a loop?

Advanced Loop Questions

1. Print all the factors of a number.
2. Accept a number and check if it is a perfect number or not. (A perfect number is a positive integer that is equal to the sum of its proper divisors. Example: 6 = 1 + 2 + 3)
3. Check if the number is Prime or not.
4. Separate each digit of a number and print it on a new line.

5. Accept a number and check if it is a palindromic number. (A palindromic number is a number that remains the same when its digits are reversed. Example: 12321)
6. Check if a number is a strong number.
7. List all the strong numbers in a given range.
8. List all the prime numbers in a given range.
9. Print the Fibonacci series.
10. Print a right triangle pattern using stars:

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*More Advanced

📟 String Questions

1. Print string in reverse, its length, in uppercase, lowercase, and copy into another string.
2. Arrange string characters such that lowercase letters should come first in another string.
3. Count all letters, digits, and special symbols from a given string.

   - Given: str1 = "P@#yn26at^&i5ve"
   - Expected Outcome:
     - Total counts of chars, digits, and symbols
       - Chars = 8
       - Digits = 3
       - Symbol = 4
4. Count Vowels from given string
5. Check string is Palindrome or not

🖥️ List Questions

1. Accept List elements and reprint it.
2. Print List elements in reverse order.
3. Print positive and negative elements of a List in separate lists.
4. Find the greatest element and print its index too. Example: {2, 96, 69, 77, 145, 20} = Max element = 145 found at 4 index
5. Find the second greatest element and print its index too. Example: {2, 96, 69, 77, 145, 20} = Max element = 145 found at 4 index
6. Check if List is sorted or not.
7. Palindromic List - Write a program to check if elements of an List are same or not it read from front or back. Example: arr= [2,3,15,15,3,2]
8. How many separate elements are there in the list excluding repetition?

Source: Sheryians Coding School
Video Link