

1. Simple Python Programs

1. Python Program to Calculate the Average of Numbers in a Given List
2. Python Program to Exchange the Values of Two Numbers Without Using a Temporary Variable
3. Python Program to Read a Number n and Compute $n + nn + nnn$
4. Python Program to Reverse a Given Number
5. Python Program to Check Whether a Number is Positive or Negative
6. Python Program to Take in the Marks of 5 Subjects and Display the Grade
7. Python Program to Print all Numbers in a Range Divisible by a Given Number
8. Python Program to Read Two Numbers and Print Their Quotient and Remainder
9. Python Program to Accept Three Digits and Print all Possible Combinations from the Digits
10. Python Program to Print Odd Numbers Within a Given Range
11. Python Program to Find the Sum of Digits in a Number
12. Python Program to Find the Smallest Divisor of an Integer
13. Python Program to Count the Number of Digits in a Number
14. Python Program to Check if a Number is a Palindrome
15. Python Program to Print all Integers that Aren't Divisible by Either 2 or 3 and Lie between 1 and 50.
16. Python Program to Read a Number n And Print the Series "1+2+.... + n = "
17. Python Program to Read a Number n and Print the Natural Numbers Summation Pattern
18. Python Program to Print an Identity Matrix
19. Python Program to Print an Inverted Star Pattern

20. Python Program to Read Print Prime Numbers in a Range using Sieve of Eratosthenes

2. Python Programming Examples on Mathematical Functions

1. Python Program to Check if a Date is Valid and Print the Incremented Date if it is
2. Python Program to Compute Simple Interest Given all the Required Values
3. Python Program to Check Whether a Given Year is a Leap Year
4. Python Program to Read Height in centimetres and then Convert the Height to Feet and Inches
5. Python Program to Take the Temperature in Celsius and Convert it to Fahrenheit
6. Python Program to Compute Prime Factors of an Integer
7. Python Program to Generate all the Divisors of an Integer
8. Python Program to Print Table of a Given Number
9. Python Program to Print Sum of Negative Numbers, Positive Even Numbers and Positive Odd numbers in a List
10. Python Program to Print Largest Even and Largest Odd Number in a List
11. Python Program to Form an Integer that has the Number of Digits at Ten's Place and the Least Significant Digit of the Entered Integer at One's Place
12. Python Program to Find Those Numbers which are Divisible by 7 and Multiple of 5 in a Given Range of Numbers
13. Python Program to Check if a Number is an Armstrong Number
14. Python Program to Print the Pascal's triangle for n number of rows given by the user
15. Python Program to Check if a Number is a Perfect Number
16. Python Program to Check if a Number is a Strong Number

17. Python Program to Find the LCM of Two Numbers
18. Python Program to Find the GCD of Two Numbers
19. Python Program to Compute a Polynomial Equation given that the Coefficients of the Polynomial are stored in a List
20. Python Program to Check If Two Numbers are Amicable Numbers
21. Python Program to Find the Area of a Triangle Given All Three Sides
22. Python Program to Find the Gravitational Force Acting Between Two Objects
23. Python Program to Check if a Number is a Prime Number
24. Python Program to Print all the Prime Numbers within a Given Range
25. Python Program to Print Numbers in a Range (1, upper) Without Using any Loops
26. Python Program to Find the Sum of Sine Series
27. Python Program to Find the Sum of Cosine Series
28. Python Program to Find the Sum of First N Natural Numbers
29. Python Program to Find the Sum of the Series: $1 + \frac{1}{2} + \frac{1}{3} + \dots + \frac{1}{N}$
30. Python Program to Find the Sum of the Series: $1 + \frac{x^2}{2} + \frac{x^3}{3} + \dots + \frac{x^n}{n}$
31. Python Program to Compute the Value of Euler's Number e. Use the Formula: $e = 1 + \frac{1}{1!} + \frac{1}{2!} + \dots + \frac{1}{n!}$
32. Python Program to Determine all Pythagorean Triplets in the Range
33. Python Program to Search the Number of Times a Particular Number Occurs in a List

3. Python Programming Examples on Lists

1. Python Program to Find the Largest Number in a List
2. Python Program to Find the Second Largest Number in a List

3. Python Program to Put Even and Odd elements in a List into Two Different Lists
4. Python Program to Merge Two Lists and Sort it
5. Python Program to Sort the List According to the Second Element in sub list
6. Python Program to Find the Second Largest Number in a List Using Bubble Sort
7. Python Program to Sort a List According to the Length of the Elements
8. Python Program to Find the Union of two Lists
9. Python Program to Find the Intersection of Two Lists
10. Python Program to Create a List of Tuples with the First Element as the Number and Second Element as the Square of the Number
11. Python Program to Find all Numbers in a Range which are Perfect Squares and Sum of all Digits in the Number is Less than 10
12. Python Program to Find the Cumulative Sum of a List where the i^{th} Element is the Sum of the First $i+1$ Elements from The Original List
13. Python Program to Generate Random Numbers from 1 to 20 and Append Them to the List
14. Python program to Sort a List of Tuples in Increasing Order by the Last Element in Each Tuple
15. Python Program to Swap the First and Last Value of a List
16. Python Program to Remove the Duplicate Items from a List
17. Python Program to Read a List of Words and Return the Length of the Longest One
18. Python Program to Remove the i^{th} Occurrence of the Given Word in a List where Words can Repeat

19. Python Program to Remove All Tuples in a List of Tuples with the USN Outside the Given Range

4. Python Programming Examples on Strings

1. Python Program to Replace all Occurrences of 'a' with \$ in a String
2. Python Program to Remove the nth Index Character from a Non-Empty String
3. Python Program to Detect if Two Strings are Anagrams
4. Python Program to Form a New String where the First Character and the Last Character have been Exchanged
5. Python Program to Count the Number of Vowels in a String
6. Python Program to Take in a String and Replace Every Blank Space with Hyphen
7. Python Program to Calculate the Length of a String Without Using a Library Function
8. Python Program to Remove the Characters of Odd Index Values in a String
9. Python Program to Calculate the Number of Words and the Number of Characters Present in a String
10. Python Program to Take in Two Strings and Display the Larger String without Using Built-in Functions
11. Python Program to Count Number of Lowercase Characters in a String
12. Python Program to Check if a String is a Palindrome or Not
13. Python Program to Calculate the Number of Upper Case Letters and Lowercase Letters in a String
14. Python Program to Check if a String is a Pangram or Not

15. Python Program to Accept a Hyphen Separated Sequence of Words as Input and Print the Words in a Hyphen-Separated Sequence after Sorting them Alphabetically
16. Python Program to Calculate the Number of Digits and Letters in a String
17. Python Program to Form a New String Made of the First 2 and Last 2 characters From a Given String
18. Python Program to Count the Occurrences of Each Word in a Given String Sentence
19. Python Program to Check if a Substring is Present in a Given String

5. Python Programming Examples on Dictionary

1. Python Program to Add a Key-Value Pair to the Dictionary
2. Python Program to Concatenate Two Dictionaries into one
3. Python Program to Check if a Given Key Exists in a Dictionary or Not
4. Python Program to Generate a Dictionary that Contains Numbers (between 1 and n) in the Form (x, x*x).
5. Python Program to Sum All the Items in a Dictionary
6. Python Program to Multiply All the Items in a Dictionary
7. Python Program to Remove the Given Key from a Dictionary
8. Python Program to Form a Dictionary from an Object of a Class
9. Python Program to Map Two Lists into a Dictionary
10. Python Program to Count the Frequency of Words Appearing in a String Using a Dictionary
11. Python Program to Create a Dictionary with Key as First Character and Value as Words Starting with that Character

6. Python Programming Examples on Sets

1. Python Program to Count the Number of Vowels Present in a String using Sets
2. Python Program to Check Common Letters in Two Input Strings
3. Python Program that Displays which Letters are in the First String but not in the Second
4. Python Program that Displays which Letters are Present in Both the Strings
5. Python Program that Displays which Letters are in the Two Strings but not in Both

7. Python Programs with Recursions

1. Python Program to Determine Whether a Given Number is Even or Odd Recursively
2. Python Program to Determine How Many Times a Given Letter Occurs in a String Recursively
3. Python Program to Find the Fibonacci Series Using Recursion
4. Python Program to Find the Factorial of a Number Using Recursion
5. Python Program to Find the Sum of Elements in a List Recursively
6. Python Program to Find the Binary Equivalent of a Number Recursively
7. Python Program to Find the Sum of the Digits of the Number Recursively
8. Python Program to Find the LCM of Two Numbers Using Recursion
9. Python Program to Find the GCD of Two Numbers Using Recursion
10. Python Program to Find if a Number is Prime or Not Prime Using Recursion
11. Python Program to Find the Product of two Numbers Using Recursion
12. Python Program to Find the Power of a Number Using Recursion

13. Python Program to Check Whether a String is a Palindrome or not Using Recursion
14. Python Program to Reverse a String Using Recursion
15. Python Program to Flatten a Nested List using Recursion
16. Python Program to Find the Total Sum of a Nested List Using Recursion
17. Python Program to Find the Length of a List Using Recursion

8. Python Programs without Recursions

1. Python Program to Find the Fibonacci Series without Using Recursion
2. Python Program to find the factorial of a number without recursion
3. Python Program to Flatten a List without using Recursion
4. Python Program to Reverse a String without using Recursion
5. Python Program to Find the Binary Equivalent of a Number without Using Recursion
6. Python Program to Find All Numbers which are Odd and Palindromes Between a Range of Numbers without using Recursion
7. Python Program to Find the Sum of Digits in a Number without Recursion

9. Python Programs on File Handling

1. Python Program to Read the Contents of a File
2. Python Program to Count the Number of Words in a Text File
3. Python Program to Count the Number of Lines in a Text File
4. Python Program to Read a String from the User and Append it into a File
5. Python Program to Count the Occurrences of a Word in a Text File
6. Python Program to Copy the Contents of One File into Another

7. Python Program that Reads a Text File and Counts the Number of Times a Certain Letter Appears in the Text File
8. Python Program to Read a Text File and Print all the Numbers Present in the Text File
9. Python Program to Append the Contents of One File to Another File
10. Python Program to Count the Number of Blank Spaces in a Text File
11. Python Program to Read a File and Capitalize the First Letter of Every Word in the File
12. Python Program to Read the Contents of a File in Reverse Order

10. Python Programs on Classes and Objects

1. Python Program to Find the Area of a Rectangle Using Classes
2. Python Program to Append, Delete and Display Elements of a List Using Classes
3. Python Program to Find the Area of a Rectangle Using Classes
4. Python Program to Create a Class and Compute the Area and the Perimeter of the Circle
5. Python Program to Create a Class which Performs Basic Calculator Operations
6. Python Program to Create a Class in which One Method Accepts a String from the User and Another Prints it
7. Python Program to Create a Class and Get All Possible Subsets from a Set of Distinct Integers