Python Practice Questions

1. Write a Python program to print the first 30 odd and even numbers and display the sum of all even and odd numbers separately.

2. Write a Python program that asks the user to enter the basic pay and prints the pay slip of the employee (House Rent: 40%, Medical Allowance: 18%).

3. Write a Python program to print the squares of numbers from 1 to 100.

4. Write a Python program to print the cubes of numbers from 1 to 100.

5. Write a Python program to calculate the area of a square.

6. Write a Python program to calculate the area of a rectangle.

7. Write a Python program to convert an amount into different currency notes (1000, 500, 100, 50, 20, 10, 5, 2, and 1).

8. Write a Python program to take the input of a student's roll number, subjects, and marks, and calculate the total and percentage.

9. Write a Python program to calculate the area of a circle.

10. Write a Python program to generate a multiplication table for any given number.

11. Write a Python program to convert a given number of seconds into hours, minutes, and seconds.

12. Write a Python program to find the largest and smallest number from 10 given numbers.

13. Write a Python program to take two numbers and print their sum, product, difference, quotient, and remainder.

14. Write a Python program to convert a binary number to an octal number.

15. Write a Python program to calculate the sum of numbers from 1 to any given number.

16. Write a Python program to convert a given number of days into years, weeks, and days.

17. Write a Python program to print the square and cube of numbers from a given range.

18. Write a Python program to find the first 10 numbers divisible by 5.

19. Write a Python program to swap two numbers.

20. Write a Python program to convert a decimal number to a binary number.

21. Write a Python program that separates and prints the digits of a five-digit number, and calculates the sum of its digits.

22. Write a Python program to print the ASCII value of all characters.

23. Write a Python program to reverse a number.

24. Write a Python program to convert a binary number to a hexadecimal number.

25. Write a Python program to count the number of words in a string.

26. Write a Python program to add two binary numbers.

27. Write a Python program to reverse a string.

28. Write a Python program to solve a quadratic equation.

29. Write a Python program to check if a number is positive or negative.

30. Write a Python program to find the number of days in a given month.

31. Write a Python program to print a right-angled triangle pattern of numbers.

32. Write a Python program to check if a given number is even or odd.

33. Write a Python program to check if a number is prime.

34. Write a Python program to print the first N Fibonacci numbers.

35. Write a Python program to find the factorial of a number.

36. Write a Python program to calculate the power of a number using recursion.

37. Write a Python program to calculate the sum of digits of a number.

38. Write a Python program to check if a number is a palindrome.

39. Write a Python program to print all prime numbers up to a given limit.

40. Write a Python program to find the greatest common divisor (GCD) of two numbers.

41. Write a Python program to find the least common multiple (LCM) of two numbers.

42. Write a Python program to print the Pascal's triangle.

43. Write a Python program to print the Armstrong numbers between 1 and 1000.

44. Write a Python program to find the sum of the series 1 + 1/2 + 1/3 + ... + 1/n.

45. Write a Python program to find the sum of the series x - x^3/3! + x^5/5! - ....

46. Write a Python program to convert Celsius to Fahrenheit.

47. Write a Python program to convert Fahrenheit to Celsius.

48. Write a Python program to find the second largest number in a list.

49. Write a Python program to check if a string is a palindrome.

50. Write a Python program to check if a string contains only digits.

51. Write a Python program to count the vowels in a string.

52. Write a Python program to count the consonants in a string.

53. Write a Python program to remove all spaces from a string.

54. Write a Python program to check if two strings are anagrams.

55. Write a Python program to find the frequency of each character in a string.

56. Write a Python program to sort words in a string in alphabetical order.

57. Write a Python program to find the largest word in a string.

58. Write a Python program to reverse the words in a string.

59. Write a Python program to find the sum of all elements in a list.

60. Write a Python program to multiply all elements in a list.

61. Write a Python program to find the smallest number in a list.

62. Write a Python program to find the sum of all even numbers in a list.

63. Write a Python program to find the sum of all odd numbers in a list.

64. Write a Python program to merge two lists and sort them.

65. Write a Python program to find the intersection of two lists.

66. Write a Python program to remove duplicates from a list.

67. Write a Python program to find the common elements between two lists.

68. Write a Python program to check if a list is a subset of another list.

69. Write a Python program to find the union of two sets.

70. Write a Python program to perform matrix addition.

71. Write a Python program to perform matrix multiplication.

72. Write a Python program to transpose a matrix.

73. Write a Python program to find the determinant of a matrix.

74. Write a Python program to find the inverse of a matrix.

75. Write a Python program to print the sum of diagonal elements in a matrix.

76. Write a Python program to calculate the Fibonacci sequence using recursion.

77. Write a Python program to flatten a list of lists.

78. Write a Python program to check if a number is an Armstrong number.

79. Write a Python program to check if a number is a perfect number.

80. Write a Python program to print the first 10 terms of the harmonic series.

81. Write a Python program to generate random numbers between a given range.

82. Write a Python program to simulate the rolling of a dice.

83. Write a Python program to simulate a coin toss.

84. Write a Python program to find the median of a list of numbers.

85. Write a Python program to calculate the mode of a list of numbers.

86. Write a Python program to calculate the mean of a list of numbers.

87. Write a Python program to convert a list of tuples into a dictionary.

88. Write a Python program to count the occurrences of each word in a string.

89. Write a Python program to sort a list of dictionaries by a specific key.

90. Write a Python program to implement a simple calculator (add, subtract, multiply, divide).

91. Write a Python program to create a simple banking system (deposit, withdraw, balance check).

92. Write a Python program to check if a year is a leap year.

93. Write a Python program to find the roots of a quadratic equation.

94. Write a Python program to implement binary search on a sorted list.

95. Write a Python program to implement bubble sort.

96. Write a Python program to implement selection sort.

97. Write a Python program to implement insertion sort.

98. Write a Python program to implement merge sort.

99. Write a Python program to implement quick sort.

100. Write a Python program to find the sum of the elements in a 2D array.