

1. Write a Python program to find the median among three given numbers.
2. Create a dictionary in python of three keys and values. Print the content of the dictionary.
3. Take a String a='organization' and count how many times letter 'o' is present in the String a.
4. Write a Python program to get the third side of right angled triangle from two given sides.
5. Consider the given list x= [1,2,3,4,5,6,7,8,9,10]
Write a python code to create a list in the python which contains only even numbers
6. Write a Python program that accepts five numbers as input and sorts them in descending order.
7. Write a Python program to solve the Fibonacci sequence using recursion.
8. Write a function in python which prints P^q where P and q are the natural numbers.
9. Take a String a='organization'. Using concept of string slicing Print "organ","gani" and "zat".
10. Write a Python program that accepts eight numbers as input and sorts them in ascending order.
11. Write a Python program to find the largest digit of a given number.
12. Consider the following list L=[10,20,30,40,50]

Write a code in python to print average of the numbers given in the list

13. Write a Python program to find the smallest digit of a given number.
14. Write a Python program to get the factorial of a non-negative integer using recursion.
15. Find palindrome of string
16. Write a Python program to Open and read the content of the text file.
17. Write two functions, one called add1 and one called multi1. add1 takes one number as an input and adds 10. multi1 takes one number as an input, and multiplies that input by whatever is returned by add1, and then returns the result.
18. Write a python program to read first 40 characters and count total number of characters of a text file.
19. Write a Python program to calculate the length of a string.
20. Write a Python program to count repeated characters in a string Sample string: 'thequickbrownfoxjumpsoverthelazydog'
Expected output :

o 4
e 3
u 2
h 2
r 2
t 2

21. Write a Python program to remove the characters which have odd index values of a given string.
22. Write a Python program to replace last value of tuples in a list
Sample list: [(10, 20, 40), (40, 50, 60), (70, 80, 90)]
Expected Output: [(10, 20, 100), (40, 50, 100), (70, 80, 100)]
23. Given an integer 457853, count the number of digits using Python.
24. Write a function called Multiply_two that takes two integers as input and returns multiplication of two numbers.
25. write a program which takes two lists as input L1= [4,1,2] and L2=[4,5,6] and create a new list which combines the elements of two lists if they are not equal as ((4,5),(4,6),(1,4),(1,5),(1,6),(2,4),(2,5),(2,6))
26. Write a python program to overwrite the content of a text file.
27. The database is "Faith Healing hospital". Create this database in the db browser. Make a table named Doctors. Add the following fields Name, Registration Number (Text and Integer), Specialization, Hours available fields in the table.
Insert atleast two values in the table.
Sql commands for update ,delete ,and display
28. The database is "DJSCE". Create this database in the db browser. Make a table named Teachers. Add the following fields Name, Qualification (Text and Integer), Department, Subjects taught.
Insert atleast two values in the table.
Sql commands for update ,delete ,and display
29. Write a python program to write squares from 1 to 10 into a text file.
30. Create a list consisting of 6 fruits. Using list comprehension, generate a new list which consists of the fruits that starts with letter 'c'
31. Create a dictionary where key is first 10 natural numbers and value is square of those numbers using dictionary comprehensions
32. Find Fibonacci series without recursion
33. Write a Program that reverses the digits of the number.
34. Write a program that opens a text file and reads through the file, and print the contents of the file in UPPER case.

35. Write a program that prompts for a file name, then opens that file and reads through the file, and print the FIRST TEN lines of the file in LOWER case.
36. Write a Python program to sort a tuple by its float element. Sample data:
[('item1', '12.20'), ('item2', '15.10'), ('item3', '24.5')]
Expected Output: [('item3', '24.5'), ('item2', '15.10'), ('item1', '12.20')]
37. Create a database in db browser Table name: Student Attributes: SAPID, Name, sex, age, email id. Insert 5 values in the table and read the content of the table through python.
38. Write a python code to create a dataframe from list.
39. Opening the file using the file object “filename” in the write mode and appending the CUBE of the numbers from 1 to 12. And then reading the written file content by opening it again in the read mode to see the written content in the file.
40. Swap two integers a=67, b=89 without using third variable
41. Declare a tuple x= (10,20,30) change the value of the tuple to x=(10,20, 'apple', 'orange').
42. Take suitable values and plot a pie chart in python
43. Write a Python program to find all keys in the provided dictionary that have the given value.
Sample Output:
Original dictionary elements:
{'Theodore': 19, 'Roxanne': 20, 'Mathew': 21, 'Betty': 20}
Find all keys in the said dictionary that have the value 20:
['Roxanne', 'Betty']
44. Write a Python program to find the key of the maximum and value in a dictionary.
Sample Output:
Original dictionary elements:
{'Theodore': 19, 'Roxanne': 22, 'Mathew': 21, 'Betty': 20}
Find the key of the maximum and minimum value of the said dictionary:
('Roxanne', 'Theodore')
45. Write a python code to change the string “car” to “cardboard”
46. Declare a list L= [1, 2, 'apple', [12, 'Mango']], Write a python code to change Mango to pineapple

47. Check whether apple is there in the list L.

```
L=[1,2,'banana',3,4,'apple']
```

- a. Add an element 'orange' at the end
- b. Add element six between 1 and 2.
- c. Remove element 4

48. Write a python code to create a dataframe from list.

49. Consider two sets in python $set1=\{10,20,30,40,50\}$ and $set2=\{5,10,15,20,25,30\}$

Write a python code to calculate union and intersection of the given sets

50. Write a Python program to convert a list of multiple integers into a single integer.

Sample list: [11, 33, 50]

Expected Output: 113350

51. Consider the given sentence a = "There are 12 months in a year. November and December are best months."

Print how many times word "months" has been repeated in above sentence.

52. Take suitable values and plot a bar chart in python

53. Write a Python program to split a list every Nth element.

Sample list: ['a', 'b', 'c', 'd', 'e', 'f', 'g', 'h', 'i', 'j', 'k', 'l', 'm', 'n']

Expected Output: [['a', 'd', 'g', 'j', 'm'], ['b', 'e', 'h', 'k', 'n'], ['c', 'f', 'i', 'l']]

54. Consider the given list L=["apple","banana","cherry"]

Write a python code to insert two more elements "mango" and "watermelon" in the list

55. Consider the tuple T=(1,2,3,4,5,6)

Write a python code to replace 3 with 30.

56. Draw a sin and cos wave using python

57. Write a NumPy program to extract all the elements of the second row from a given (4x4) array.

Sample Output: Original array:

```
[[ 0 1 2 3]
```

```
 [ 4 5 6 7]
```

```
 [ 8 9 10 11]
```

```
 [12 13 14 15]]
```

Extracted data: Second row

```
[4 5 6 7]
```

58. Consider given string a = "South America"

Write a python code to count total number of vowels and consonants

59. Consider the given text a=" Company123"

Check in python if above text contains only alphanumeric characters

60. Write a NumPy program to extract third and fourth elements of the first and second rows from a given (4x4) array.

Sample Output:

Original array:

```
[[ 0 1 2 3]
```

```
[ 4 5 6 7]
```

```
[ 8 9 10 11]
```

```
[12 13 14 15]]
```

Extracted data: Third and fourth elements of the first and second rows

```
[[2 3]
```

```
[6 7]]
```

61. Consider given text txt = "I could eat bananas all day"

Partition above text in three parts using python. bananas should be middle partition.

62. Create and multiply two 2-dimensional array and print the result

63. Draw three graphs together with different colours using python

64. Consider the given sentence a=" There are 12 months in a year. November and December are best months."

Write a python code to replace November with October.

65. Create a 3*3 array and multiply the elements of first column by 10, second column by 20 and third column by 30.

66. Write a NumPy program to calculate the sum of all columns of a 2D NumPy array.

Sample Output:

Original array:

```
[[ 0 1 2 3 4 5 6 7 8]
```

```
[ 9 10 11 12 13 14 15 16 17]
```

```
[18 19 20 21 22 23 24 25 26]
```

```
[27 28 29 30 31 32 33 34 35]]
```

Sum of all columns:

```
[54 58 62 66 70 74 78 82 86]
```

67. Consider given text a=" Structure"

Using concept of string slicing print "Struct", "ture" and "ruct"

Write a python program to open a file and count number of words.

68. Create a 3*3 array of non-zero elements and replace the first row to all zeros.

69. Create and multiply two 2-dimensional array and print the result

