1. nb

CODE:

1. n = int(input("Number of Elements to take average of: "))
2. l=[]
3. **for** i **in** range(1,n+1):
4. element = int(input("Enter the element: "))
5. l.append(element)
6. average = sum(l)/n
7. **print**("Average of the elements in list",round(average,2))

### 2. Is it possible to build a Python program that reverses a number?

CODE:

1. n = int(input("Enter number: "))
3. Reverse= 0
5. **while**(n>0):
6. digit = n%10
7. reverse = reverse\*10+digit
8. n=n//10
9. **print**("The reverse of the number:",reverse)

### 3. What is a lambda function, and how does it work?

CODE:

1. # Python program to show how to use lambda functions
3. # Creating a lambda function for addition
4. sum\_ = **lambda** x, y, z : x + y + z
5. **print**("Sum using lambda function is: ", sum\_(4, 6, 8))

### 4. What method will you use to turn the string's all characters into lowercase letters?

CODE:

1. #
2. + P+yt+hon program to show how to convert a string to lower case
4. string = 'JAVATPOINT'
5. **print**(string.lower())

### 5. What is the best way to add items to a Python array?

CODE:

1. # Python program to show how to add elements to an array
2. import array as arr
3. array = arr.array('d', [1 , 2 ,3] )
4. array.append(8) # appending will add an element to the end of the array
5. **print**(array)
6. array.extend([4,6,9]) # extending will add elements by looping through the given iterable
7. **print**(array)
8. array.insert(2, 9) # inserting will add the element at the specified index
9. **print**(array)

### 6. What is the best way to remove values from a Python array?

CODE:

1. # Python program to show how to remove elements from a Python array
2. Import array as arr
3. array = arr.array('d', [1, 3, 8, 1, 4, 8, 2, 4])
4. **print**(array.pop()) # By default it will remove and return the last element of the array
5. **print**(array.pop(5)) # It will return and remove the element present at 5th index
6. array.remove(1) # It will remove only the first occurrence of the element - 1 from the array
7. **print**(array)

### 7. In Python, create a program that generates a Fibonacci sequence.

CODE:

1. #taking number of terms to print the series
2. n = 9
3. first = 0 #first value of series
4. second = 1 #second value of series
5. series = [first, second]
6. **if** n == 0:
8. **print**("The required fibonacci series is",first)
9. **else**:
11. **for** i **in** range(0,n-2):
13. num = series[i] + series[i+1]
15. series.append(num)
16. **print**(series)

### 8. Make a Python script that checks if a given number is prime.

1. CODE: # Python program to check if a number is prime or not
3. # Declaring a variable
4. n = 37
5. **if** n == 2:
6. **print**("2 is a prime number")
8. **if** n != 1:
9. **for** i **in** range(2, n):
10. **if** n % i == 0:
11. **print**("The given number is a composite number")
12. **break**
13. **if** i == n-1:
14. **print**("The given number is a prime number")
15. **else**:
16. **print**("1 is not a prime number")

### 9. Create a Python program that checks if a given sequence is a Palindrome.

CODE:

1. # Python program to check if the given string is a palindrome
3. # Creating a string
4. sequence = 'abjucujba'
5. # Reversing the string
6. reverse = sequence[::-1]
8. # Checking if the string is a palindrome
9. **if** reverse == sequence:
10. **print**("The sequence is a palindrome")
11. **else**:
12. **print**("The sequence is not a palindrome")

### 10. Using the Iterative technique, calculate factorial in Python.

CODE:

1. num = 12
2. fact = 1
3. **if** num < 0:
5. **print**("Since number is negative factorial cannot be calculated")
6. **elif** num == 0:
8. **print**("Factorial of 0 is 1")
9. **else**:
11. **for** i **in** range(1, num + 1):
13. fact = fact \* i
15. **print**("Factorial of",num ,"is",fact)

What are namespaces in python?

What is scope resolution in python?

What is path in python?

How to use split function in python?

What is end and separate parameter in python?

What is list in python?

What is heterogenous list in python?

Name some methods in list?

What is tuple?

Write python program o remove duplicate character from given string?

**All Operators in Python 🔥**

Python provides several types of **operators** to perform different kinds of operations. These are:

| **Operator Type** | **Operators** |
| --- | --- |
| **Arithmetic Operators** | +, -, \*, /, %, \*\*, // |
| **Comparison (Relational) Operators** | ==, !=, >, <, >=, <= |
| **Logical Operators** | and, or, not |
| **Bitwise Operators** | &, ` |
| **Assignment Operators** | =, +=, -=, \*=, /=, %=, //=, \*\*=, &=, ` |
| **Identity Operators** | is, is not |
| **Membership Operators** | in, not in |

**\*\*1️⃣ Arithmetic Operators (+, -, \*, /, %, //, )**

These operators perform mathematical calculations.

| **Operator** | **Description** | **Example** | **Output** |
| --- | --- | --- | --- |
| + | Addition | 10 + 5 | 15 |
| - | Subtraction | 10 - 5 | 5 |
| \* | Multiplication | 10 \* 5 | 50 |
| / | Division (float) | 10 / 3 | 3.3333 |
| // | Floor Division | 10 // 3 | 3 |
| % | Modulus (Remainder) | 10 % 3 | 1 |
| \*\* | Exponentiation (Power) | 2 \*\* 3 | 8 |

**Example**