# **Python Programming**

## **Simple If:**

- 1. Wap to print the square of a number only if it is even.
- 2. Wap to check whether the character is vowel or not.
- 3. Wap to print Ascii value of a character only if it is upper case.
- 4. Wap to print the cube of a number only if it is divisible by 9 or 6.
- 5. Wap to check whether the given integer is 3 Digit number.
- 6. Wap to check whether the last digit of a given number is 5.
- 7. Wap to check whether the given data is float.
- 8. Wap to check whether the data is single value data.
- 9. Wap to check whether the given character is digit or not.
- 10. Wap to check whether the given integer is multiple of 3.

# If else:

- 11. Wap to check whether the data is mutable or not.
- 12. Wap to check whether the given character is digit or not.
- 13. Wap to check whether the given character is special or not.
- 14. Wap to check whether a list consists of middle value or not.
- 15. Wap to check whether the number is even or odd.
- 16. Wap to check whether the given data is mutable or immutable.
- 17. Wap to check whether 2 values are pointing to the same memory or not.
- 18. Consider a tuple of length 2 and check whether the tuple is homogenous or not.
- 19. Wap to check whether the string is palindrome or not.
- 20. Wap to check whether the number is positive or negative.

# Elif:

- 21. Wap to check whether the char is uppercase, lowercase, digit or special char.
- 22. Wap to check whether the given integer is single digit or two digits or three digits or more than three digits.
- 23. Wap to check the given points are lying in which quadrant.
- 24. Wap to find the greatest of 3 numbers.
- 25. Wap to find the smallest of 3 numbers.
- 26. Wap to check the relation between two integer numbers.
- 27. Consider a character input if it is uppercase convert it into lowercase, if it is lowercase convert it into uppercase, if it is digit print the reminder when it is divided by 3 else if it is special character print it's ASCII value.
- 28. Wap to print 'Fizz' if the given number is multiple of three print 'buzz' if the given number is multiple of 5 and print 'Fizzbuzz' if the number is multiple of both 3 and 5.

### **Nested if:**

- 29. Wap to login into the Instagram with valid username and password.(enter password only if the user name is valid)
- 30. Wap to print the middle value of a list only if it is string.
- 31. Wap to check whether the character is vowel or consonant.
- 32. Wap to find the greatest of 4 numbers.
- 33. Wap to print the value as it is only if the length of the value is even.
- 34. Wap to print the last value of a list only if it is palindrome string starting with vowel.
- 35. Wap to print the reversed string only if it is starting with vowel ,ending with consonant and having a middle value.
- 36. Wap to find the second greatest of 4 values.
- 37. Wap to find the smallest of 4 numbers.
- 38. Write a program to print middle Character of the given string only if it is upper Case Character.

#### While loop:

- 39. Wap to print python for 5 times.
- 40. Wap to print n natural numbers.
- 41. Wap to print multiplication table for n.
- 42. Wap to find the sum of n natural numbers.
- 43. Wap to find the product of n natural numbers or factorial of a number.
- 44. Wap to print all the characters of a string.
- 45. Wap to print all the characters present at even index of a string.
- 46. Wap to extract all the lowercase characters present in a string.
- 47. Wap to extract all the vowels present in a string.
- 48. Wap to print factors of a integer number.
- 49. Wap to toggle a string.
- 50. Wap to reverse the given number.
- 51. Wap to find the sum of individual digits of a number.
- 52. Wap to check whether the number is perfect or not.
- 53. Wap to login to phonepe by entering correct otp.
- 54. Wap to run infinite loop until user enters the correct password.
- 55. Wap to extaract all the even integers present in a tuple at odd index.
- 56. Wap to remove duplicates from a list without converting into set.
- 57. Wap to find the sum of all the odd numbers between the given range.
- 58. Wap to find the greatest number in a given list of integers.
- 59. Wap to find the sum of cube of a number in a string.
- 60. Wap to check whether the number is Armstrong or not.

- 61. Wap to get the following output.
  - A='10011100' B='00110101' out=4(count of positions having same values)
- 62. Wap to check the given number is prime or not.
- 63. Wap to check whether the number is palindrome or not.
- 64. Wap to find the HCF of two numbers.
- 65. Wap to convert binary to decinaml.
- 66. Wap to convert decimal to binary.
- 67. Wap to count the number of words in a string.
- 68. Wap to guess the number.
- 69. Wap to find the common elements in two sets
- 70. Wap to find the product of all the digits present in a number.

#### For loop:

- 71. Wap to print all the integers present in a list.
- 72. Wap to find the length of homogenous tuple without len().
- 73. Wap to extract all the even numbers present in a list.
- 74. Wap to remove duplicates from list
- 75. Wap to reverse a string without using slicing.
- 76.wap to extract all the lowercase characters in a string only if the ascii value is even.
- 77. Wap to check whether the last digit of an integer is even or not.
- 78. Wap to extract all the key value pairs from the dictionary only if the keys are of string datatype and values are integers.
- 79. Wap to extract key value pairs from the dictionary only if both keys and values are exactly same.
- 80. Wap to get the following output using len function.

```
S='power star'
```

Out={'power':5,'star':4}

81. Wap to get the following output.

S='power star'

Out={'power':'rewop','star':'rats'}

- 82. wap to extract all the non default values from a list.
- 83. Wap to check whether the list is homogenous or not.
- 84. Wap to replace the space by \* present in a string
- 85. Wap to count the number of occurrence of a specified character.
- 86. Wap to get the following output.

S='always keep smiling'

Out-'syawla peek gnilims'

87. Wap to get the following output.

In='push maadi kushi padi'
Out={'push':'ph','maadi':'a','kushi':'s','padi':'pi'}

- 88. Wap to toggle a string.
- 89. Wap extract upper, lower, digit and special characters present in a string to different. output variable
- 90. Wap to get the following output.

S='hai hello '

Out={'hai':'ai','hello:'eo'}

91. Wap to get the following output.

S=['jiocinema.com','file.py','web.html','amazom.com','www.org']
Out=['com','py','html','org']

92. Wap to get the following output.

93. Wap to get the following output.

L=['hai',34,3.4,'hello',90,'byebye']
Out={'hai':'hi','hello':'ho','byebye':'be'}

94.wap to get the following output.

In='hello'

Out={0:'h',1:'e',2:'1',3:'1',4:'e'}

- 95. Wap to extract all the string values present in list only if the string is palindrome.
- 96. Wap to return the positions of vowels present in the given string.
- 97. Wap to check whether the given collection is having nested collection or not.
- 98. Wap to count the number of words in a string.
- 99. Wap to check whether the number is neon number or not.

$$N=9 \rightarrow 9**2=81 \rightarrow 8+1=9$$

- 100. Wap to find the longest word in a string.
- 101. Wap to replace the special character present in a string by space.
- 102.wap to print the square of all the integers present in a list.
- 103. Wap to extract all the odd number present at even index from a list.
- 104. Wap to extract all the mutable values present in a tuple.
- 105. Wap to get the following output.

In='10100011231'

Out='010111000' ( $0 \rightarrow 1$  and  $1 \rightarrow 0$  if it is other than 0 &1 ignore)

106. Wap to get the following output.

In='abacbaacc'

Out= $\{'a':4,'b':2,'c':3\}$ 

107.wap to extract keyvalue pair from the dictionary only if the key is Boolean datatype.

108. Wap to get the following output.

In='127342'

Out='242173' (extract even and odd digits separately and concatenate both)

109. Wap to checek whether the string is having only lowercase or not using continue.

110. Wap to find the sum square of individual digits of a string.

#### **Nested For Loop:**

```
111. Wap to get the following output. without length function.
```

S='power star'

Out={'power':5,'star':4}

112. Wap to get the following output.

S='power star'

Out={'power':2,'star':1} (no of vowels is key)

113. Wap to get the following output.

S='kabab is love'

Out={'kabab':['babak',2,'kbb'],'is':['si',1,'i'],'love':['evol',2,'lv']} [reverse,no of vowels,char at even index]

114. Wap to get the following output.

S='kabab is love'

115. Wap to get the following output.

In=[100,200,35,40,60]

Out=[335,235,400,395,375] (total sum-value)

116. Wap to get the following output.

In='bacbcaabbaa'

Out='b4a5c2'

117. Wap to get the following output

In=[100,200,50,400,300]

N = 300

Out=[[100,200],[300]]

- 118. Wap to check whether the number is strong or not.
- 119. Wap to get the following output.

120. Wap to get the following output.

In=['hello',227,3.4,'last',189,34]

Out=[722,981,43]

## **Functions:**

- 121. Wap to check whether the number is strong or not.
- 122. Wap to print the strong numbers between the given range.
- 123. Wap to find the nth strong number.
- 124. Wap to check whether the number is arm strong or not.
- 125. Wap to print the arm strong numbers between the given range.
- 126. Wap to find the nth arm strong number.
- 127. Wap to check whether the number is perfect or not.
- 128.wap to print the perfect numbers between the given range.
- 129. Wap to find the nth perfect number.
- 130. Wap to check whether the number is prime or not.
- 131.wap to print the prime numbers between the given range.
- 132. Wap to find the nth prime number.
- 133. Wap to check whether the number is Fibonacci number or not.
- 134.wap to print the Fibonacci numbers between the given range.
- 135. Wap to find the nth Fibonacci number.
- 136. Wap to check whether the number is palindrome or not.
- 137.wap to print the palindrome numbers between the given range.
- 138. Wap to find the nth palindrome number.
- 139. Wap to check whether the number is happy number or not.
- 140.wap to print the happy numbers between the given range.
- 141. Wap to find the nth happy number.
- 142.wap to check whether the string is anagram or not.
- 143. Wap to check whether the string is pangram or not.
- 144. Wap to check whether the number is xylem or not.

145. Wap to check whether the number is spy or not.

Ex: 
$$123 \rightarrow 1+2+3=1*2*3$$