

- Q1. Write a program to print the following using while loop
- a. First 10 Even numbers
 - b. First 10 Odd numbers
 - c. First 10 Natural numbers
 - d. First 10 Whole numbers
- Q2. Write a program to print first 10 integers and their squares using while loop.
- Q3. Write while loop statement to print the following series: 10, 20, 30 ... 300
- Q4. Write a while loop statement to print the following series 105, 98, 917.
- Q5. Write a program to print first 10 natural number in reverse order using while loop.
- Q6. Write a program to print sum of first 10 Natural numbers.
- Q7. Write a program to print sum of first 10 Even numbers.
- Q8. Write a program to print table of a number entered from the user.
- Q9. Write a program to print all even numbers that falls between two numbers (exclusive both numbers) entered from the user using while loop.
- Q10. Write a program to check whether a number is prime or not using while loop.
- Q11. Write a program to find the sum of the digits of a number accepted from the user.
- Q12. Write a program to find the product of the digits of a number accepted from the user.
- Q13. Write a program to reverse the number accepted from user using while loop.
- Q14. Write a program to display the number names of the digits of a number entered by user, for example if the number is 231 then output should be Two Three One
- Q15. Write a program to print the Fibonacci series till n terms (Accept n from user) using while loop.
- Q16. Write a program to print the factorial of a number accepted from user.
- Q17. Write a program to check whether a number is Armstrong or not. (Armstrong number is a number that is equal to the sum of cubes of its digits for example : $153 = 1^3 + 5^3 + 3^3$.)
- Q18. Write a program to add first n terms of the following series using a while loop:
 $1/1! + 1/2! + 1/3! + \dots + 1/n!$
- Q19. Write a program to enter the numbers till the user wants and at the end it should display the sum of all the numbers entered.
- Q20. Write a program to enter the numbers till the user enter ZERO and at the end it should display the count of positive and negative numbers entered.
- Q21. Write a program to find the HCF of two numbers entered from the user.
- Q22. Write a program to convert Decimal to Binary.
- Q23. Write a program to convert Binary to Decimal.
- Q24. Write a program to check whether a number is palindrome or not.
- Q25. Write a python program to sum the sequence:
 $1 + 1/1! + 1/2! + 1/3! + \dots + 1/n!$
- Q26. Write a program to accept 10 numbers from the user and display it's average
- Q27. Write a program to accept 10 numbers from the user and display the largest & smallest number number.
- Q28. Write a program to display sum of odd numbers and even numbers separately that fall between two numbers accepted from the user.(including both numbers) using while loop.
- Q29. Write a program to display all the numbers which are divisible by 13 but not by 3 between 100 and 500.(exclusive both numbers)

Q30. Write a program to print the following series till n terms.
 2 , 22 , 222 , 2222 _ _ _ _ n terms

Q31. Write a program to print the following series till n terms.
 1 4 9 16 25 _ _ _ _ n terms.

Q32. Write a program to find the sum of the following series(accept values of x and n from user)
 $1 + x/1! + x^2/2! + \dots + x^n/n!$

Q33. Write a program to find the sum of following series :
 $x + x^2/2 + \dots + x^n/n$

Q34. Write a program to find the sum of following series
 1 + 8 + 27n terms

Q35. Write a program to find the sum of following series:
 1 + 2 + 6 + 24 + 120 n terms

Q36. Write a program to find the sum of following series:
 $S = 1 + 4 - 9 + 16 - 25 + 36 - \dots$ n terms

Q37. Write a Program to print all the characters in the string 'PYTHON' using while loop.

Q38. Write a program to print only odd numbers from the given list using while loop. L = [23, 45, 32, 25, 46, 33, 71, 90]

Q39. Write a program to print all the factors of a number using while loop.

Q40. Write a python program to get the following output

```

1—49
2—48
3—47
...
...
48—2
49—1

```

Q41. Write a program to extract all the upper case character from the given string

Q42. Write a Program to separate positive and negative number from a list.

Q43. Write a program that appends the type of elements from a list.

Q44. Write a program to fetch only even values from a dictionary.

Q45. Write a program to extract all the string data items from the given list only if string is palindrome

Q46. Write a program to extract all the special characters from the given string

Q47. Write a program to extract all the upper case character ,lower case character ,numbers and special characters into four different output variables from the given string

Q48. Write a program to get the following output -

Q49. Write a program to convert all the lower case character to upper case characters present in a given string

Q50. Write a program to convert all the lower case character to upper case character and upper case character to lower case character by keeping number and special character as it is

Q51. Write a program to extract all the lower case character from the given string only if its ascii value is even

Q52. Write a program to get the following output

Q53. Write a program to get the following output

```
input='hello'
output={0:'h' , 1:'e' , 2:'l' , 3:'l' , 4:'o'}
```

Q54. Write a program to get the following output

```
input=['hai' , 89 , 3.4 , 'hello' , 90 , 'py']
output={'hai':'hi' , 'hello':'ho' , 'py':'py'}
```

Q55. Write a program to get the following output

```
input='hai hello'
output='olleh iah'
```

Q56. write a program to count the number of vowels present in a given string

Q57. Write a program to get the following output

```
input='hai hello good morning'
output={'hai':'a' , 'hello':'l' , 'good':'gd' , 'morning':'n'}
```

Q58. Write a program to get the following output

```
input=['jiocinema.com' , 'file.py' , 'web.html']
output=['com' , 'py' , 'html']
```

Q59. Write a program to get the following output

```
input=['jiocinema.com' , 'file.py' , 'web.html' , 'amazon.com' , 'text.py']
output={'com':['jiocinema' , 'amazon'] , 'py':['file' , 'text'] , 'html':['web']}
```

Q60. Write a program to get the following output(count no of vowels)

```
input='hai hello'
output={'hai':2 , 'hello':2}
```

Q61. Write a program to extract all the string values present in the list collection only if the last character is upper case. Concatenate the extracted output using “*”

Q62. write a program to extract all the list data items present in list collection only if it is having middle value , that value is integer and having even number at start

Q63. Write a program to get the following output

```
input= 'just looking like wow'
output= 'jusT LOOKING Like a wow'
```

Q64. Program to find the common elements in two sets using a while loop

Q65. Program to check if a number is a perfect number or not using while loop

Q66. Program to find the length of the longest substring without repeating characters in a given string using while loop

Q67. Program to find the number of ways to make change for a given amount using a given set of coins using while loop

Q68. Program to find the minimum number of coins needed to make a given amount using a given set of coins using while loop

Q69. Program to find the maximum and minimum elements in a tuple using while loop

Q70. Program to find the union, intersection, and difference of two sets using while loop

Q71. Program to count the number of occurrences of each character in a string using a dictionary and while loop

Q72. Write a program to remove duplicate value from collection without converting to set

Q73. Write a program to find the length of collection without using len function

Q74. Write a program to extract all the integers from a list only if the integer is starting from even number and ending as odd number and having length more than 3

Q75. Write a program to extract all the individual data items of a list if the length of extracted output is more than 4 print the first value of the output else print last value of the output list and add 10 to it

Q76. Write a program to get the following output

```
input1='11001010'
```

```
input2='01110010'
```

```
output=4(to count how many positions are having same value)
```

Q77. Write a program to get the following output

```
input=[1,2,3,4,5,6]
```

```
value=3
```

```
output=[1,2,3][4,5,6]
```

```
If value=2
```

```
output=[1,2][3,4][5,6]
```

Q78. Write a program to check whether the given number is spy number or not i.e., $1*2*3=1+2+3$

Q79. Write a program to check whether the given number is Xylem number or not i.e., $1234 \rightarrow 1+4=2+3$

Q80. Write a program to check whether the given number is phloem number or not
i.e., $12345 \rightarrow 1+5!=2+3+4$

Q81. Write a program to check whether the given number is neon number or not
i.e., 9 is number, $9**2=81 \rightarrow 8+1=9$

Q85. Write a program to check whether the given number is automorphic or not
i.e., 5 is number $5**2=25$ last digit of 25 is the number itself

Q86. Write a program to count number of words in the given string

Q87. Write a program to find the length of the longest word

Q88. Write a program to count number of consonants in the given string

Q89. Write a program to check the type of data entered by the users

Q90. Write a program to check whether the given tuple is palindrome or not

Q91. Write a program to check whether the given collection is having nested collection or not

Q92. Write a program to return the positions of vowels present in the given string

Q93. Write a program to find length of collection without using len function

Q94. Write a program to whether the entered username and password is correct or not if not correct print enter again

Q95. Write a program to extract all integer data items from tuple

Q96. Write a program to extract all the non default values from the list

Q97. Write a program to check whether the first and last value in the collection is float if yes add those 2 values