Looping

1 1, 2, 3, 4, 5, 6, 7, 8, 9 n

2 Write a Python Program to print n to 1 numbers.

3 Write a Python Program to print 1 to n odd numbers

4 Write a Python Program to print 1 to n even numbers

5 Write a Python Program to print n to 1 odd numbers

6 Write a Python Program to print n to 1 even numbers

7 1+2+3+4+5+6+7+8+9 n

8 1, 4, 9, 16, 25, 36 n

9 1+4+9+16+25+36 n

10 1, 1, 2, 3, 5, 8, 13, 21 n

11 1, 2, 4, 7, 11, 16 n

12 Write a program to read any integer number and print it in reverse.

13 Write a program to read any number and print the sum of all values.
For ex. Input - 3564 Output - 3+5+6+4 = 18

14 Write a program to determine whether a number is prime or not.
(A prime number is one, which is divisible only by 1 or itself only.)

15 Write a Python Program to find out whether a given no. is an Armstrong no. or not.
(Hint : $1^3 + 5^3 + 3^3$ = 153, is an Armstrong no.

16 Write a program to find out Factorial of a given number. (e.g. 5! = 120)

17 1! + 2! + 3! + 4! + 5! n

18 Write a Python Program to generate following series:
$\frac{1}{1} + \frac{2}{2} + \frac{3}{3} + \frac{4}{4} +$ (10*Terms*)

$\frac{2!}{1} \quad \frac{3!}{2} \quad \frac{4!}{3} \quad \frac{5!}{4}$

19 Write a Python Program to generate the following
output 1+2+3+4+5+6+7+8+9+10=55

20 Write a Python Program to print out all Armstrong numbers between 1 to 500.

21 Write a program and to accept any integer number and print the individual number in words. For ex. Input - 546 Output – Six Four Five

22 Write a program and to accept any integer number and print the individual number in words. For ex. Input - 546 Output – Five Four Six

23 Write a Python Program that accept an integer number and determine whether the inputted number is palindrome or not?

24 Write a Python Program to do the addition of the first n terms of the fibonacci series.

25 Generate the following series.
2 3 5 9 17 33 65 …….n

26 1 2 2 4 8 32 256 up to a given range.

27 Write a program to find first N prime number.

28 Generate following series.
2 3 5 9 17 33 65 n

29 Display the following series :
1 2 2 4 8 32 256 up to a given range.

30 Write a program to take an integer and find the sum of first and last digit.
Ex. Input: 1234
Output: 5

31 Calculate the sum of first n odd integers (i.e. 1+3+5..+2n-1)

32 Input any number in decimal form and print it in Binary, octal and hexadecimal form.

33 Write a program to print first 10 numbers of fibonacci series, which are prime numbers.

34 Write a program to generate series like 2 5 10 17 26……..n (Square + 1 Series)

35 Write a Python Program to Calculate a Series like 1/1! + 2/2! + + 10/10!

36 Write a Python Program to Calculate the sum of first 25 prime numbers. (Result = 101)

37 Write a Python Program to Calculate the sum of fist 50 odd numbers. (Result = 625)

38 Write a Python Program to Calculate the Series like 1-2+3-4…. –10 (Result = -5)

39 Write a Python Program to Calculate the Series like 1/2 + 2/3 + 3/4 + …+9/10 (Result = 7.071)

40 Write a Python Program to Calculate the series like 1+2+3…+10 (Result = 55)

41 Write a Python Program to Generate a Series like 2 4 8 16 32…1048

42 Write a Python Program to Generate a Series like 1 11 20 28 35 41 46 50 53 55 56

43 Write a Python Program to Generate a Series like 1 10 2 9 3 8 4 7 5 6

44 Write a Python Program to Generate a Series like 2 4 6 20

45 Write a Python Program to Generate a Series like 5 10 15 …50

46 Write a Python Program to Generate a Series like 100 99 98 97 …90

47 Write a Python Program to Generate a Series like 1 3 5 7 19

48 Write a Python Program to Generate a Series like 1 2 3 4 10

49 Write a Python Program to check whether the given number is perfect (or magic) or not. A number is perfect if its sum of digits is same as multiplication of digit. (e.g. 123 is perfect no. because 1+2+3 = 1*2*3)

50 Write a Python Program to check whether the entered the number is magic number or not.

Note : The magic number is that the sum and multiplication of each digit is the same. Input : 123 means 1 + 2 +3 = 1 * 2 * 3 Output : Magic Number

51 Write a Python Program to do the addition of the first n terms of the fibonacci series.

52 Write a program to find first N prime number.

53 Generate following series.

2 3 5 9 17 33 65 …….n

54 Write a program to generate following output

1
4 5
9 10 11
16 17 18 19
.
n

55 Display the following triangle up to given lines.

```
    *
   * *
  * * *
 * * * *
* * * * *
```

56 Write a Python Program to generate the following output 1
123
12345
1234567
123456789

57 Accept 5 number as input and display minimum and maximum of them.

58 Input marks of 3 subjects. Prepare total, percentage and grade for a student.

59 Write a Python Program to input any number and count the no. of digits in that number.

60 Write a program to print first 10 numbers of fibonacci series, which are prime numbers.

61 Write a program to accept any number and count how many odd digits and how many even digits in that number.

62 Write a program, which will read an integer value for a base, then read a positive integer raised to that base and print its value.

63 Write a menu driven program which has the following options:

a. Addition of 2 numbers
b. Subtraction of 2 numbers
c. Multiplication of 2 numbers
d. Division of 2 numbers
e. Exit.

Make use of SWITCH statement.

64 Write a menu driven program which has the following options:

a. Positive or Negative.
b. Even or Odd.
c. Leap Year or Not Leap Year.
d. Maximum of two numbers.
e. Exit.

Make use of SWITCH statement.

65 Write a menu driven program which has the following options:

a. Factorial of a number.
b. Reverse of a number.
c. Sum of Digits of a number.
d. Count Digits of a number.
e. Exit.

Make use of SWITCH statement.

66 Write a menu driven program which has the following options:

a. Prime or Not.
b. Armstrong or Not.
c. Perfect or Not.
d. Palindrome or not.
e. Exit.

Make use of SWITCH statement.

67 Write a Python Program to print the

output as follows. C
CP
CPr

CPro
CProg
CProgr
CProgra
CProgram
CProgramm
CProgrammi
CProgrammin
CProgramming

68 Write a Python Program to print the
out as follows CProgramming
PyProgrammin
PyProgrammi
PyProgramm
PyProgram
PyProgra
PyProgr
PyProg
PyPr

69 1. Write a Python Program to Generate the following output.

(a)
1 2 3 4 5
1 2 3 4 5
1 2 3 4 5
1 2 3 4 5
1 2 3 4 5

(b)
1 1 1 1 1
2 2 2 2 2
3 3 3 3 3
4 4 4 4 4
5 5 5 5 5

(c)
1
1 2
1 2 3
1 2 3 4
1 2 3 4 5

(d)
1
2 2
3 3 3
4 4 4 4
5 5 5 5 5

(e)
5 5 5 5 5
4 4 4 4
3 3 3
2 2
1

(f)
5 4 3 2 1
5 4 3 2
5 4 3
5 4
5

(g)
1
2 1
3 2 1
4 3 2 1
5 4 3 2 1

(h)
5
4 5
3 4 5
2 3 4 5
1 2 3 4 5

(i)
1 2 3 4 5
2 3 4 5
3 4 5
4 5

5

(j)
5 4 3 2 1
4 3 2 1
3 2 1
2 1
1

(k)
5
5 4
5 4 3
5 4 3 2
5 4 3 2 1

(l)
2 4 6 8 10
4 6 8 10
6 8 10
8 10
10

(m)
1
2 3
4 5 6
7 8 9 10
11 12 13 14 15

(n)
1
0 1
0 1 0
1 0 1 0
1 0 1 0 1

(o)
1
1 0
1 0 1
1 0 1 0
1 0 1 0 1

(p)
A B C D E F G F E D C B A
A B C D E F F E D C B A A
B C D E E D C B A
A B C D D C B A
A B C C B A
A B B A
A A

(q)
1
232
34543
4567654
567898765
67890109876
7890123210987
890123454321098
90123456765432109
0123456789876543210

70 Write a Python Program that accept an integer number and generate the following output on the screen: Input Output

1	1
2	1 1 1
3	1 1 1 1 2 1
n	…….

71 Display the following triangle up to given lines.

*
* *
* * *
* * * *
* * * * *

72 Write a program to generate following output

```
1
4       5
9       10      11
16      17      18      19
.
.
n
```

73 Write a program to print output as follow

```
1 0 1 0 1
0 1 0 1 0
1 0 1 0 1
0 1 0 1 0
1 0 1 0 1
```

74 Write a Python Program to print the following series

```
A   B   C   D   E
F   G   H   I
J   K   L
M   N
O
```

(Hint : ASCII value of A = 65, B = 66, C = 67……)

75 Write a program to count the vowels and letters in text given as standard input. Then print out the number of occurrences of each of the vowels a, e, i, o and u in the text, the total number of letters, and each of the vowels as an integer percentage of the letter total.

Suggested output format is:

```
Numbers of characters:
a   3 ; e   2 ; i   0 ; o   1 ; u   0 ; rest 17
Percentages of total:
```

a 13%; e 8%; i 0%; o 4%; u 0%; rest 73%