Output Programs

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a.
```
n=3
for i in range(1, n+2):
  print(i*i)
```
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b.
```
n=19
for i in range(15, n+2):
  print(i%2, sep='')
```
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c.
```
n=30
for i in range(27, n+2):
  print(i+5, end='@')
```
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d.
```
for x in range(10,20,3):
  print(x, end="#")
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e.
```
for a in range(10, 50,11):
  if a%2==0:
    print(a+5)
  else:
    print(a-5)
```
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f.
```
for i in range(16,4,-4):
  if i % 3 ==0:
    print(i/2)
  else:
    print("--")
print("Quitting")
```
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g.
```
num=258
while num>0:
  print(num%10)
  num=num//10
```
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h.
```
count=0
while count<6:
  print("Hello")
  count+=1
```
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i.
```
x=10
y=0
while x>y:
  print(x,y)
  x=x-2
  y=y+2
```
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j.
```
i=10
while i<50:
  print("i=",i,i*2)
  i=i+10
```
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Loop Programs

1. Write a program to display a table of a given number input.

2. Write a program to display the square of all numbers till n, where n is number input taken from the user. Write a program to print your name n times.

3. Write a program to display all numbers divisible by 7 in the given range. Take the starting and ending number of range from the user.

4. Write a program to find out the factorial of a given number.

5. Write a program to print the following series:

   a. 1 8 27 .... n (cube of all nos)

   b. 1 9 25 .... n (square of odd nos.)

6. Write a program to find out whether the given number is prime or not.

7. Write a program to display the sum of all odd numbers between 1 and 100.

8. Write a program to display fibonacci series upto n terms.

   0 1 1 2 3 5 8 13...n

9. Write a program to input 5 numbers and find out their sum and display.

10. Write a program to find out the largest number out of entered numbers.

11. Write a program to display all prime numbers between 1..100.

12. Take 2 numbers (x,y) as input and find out x raised to the power of length of y.

13. Write a program to input 2 numbers m and n. Then display the first m multiples of n.

14. Write a program to input 10 numbers. If the user enters a negative number, the loop should stop and display the sum and average of all numbers entered.

15. Write a program to find the sum of first n terms of the following series:

    a. $x + x^2 + x^3 + x^4 + \ldots\ldots n$

    b. $x - x^2 + x^3 - x^4 + \ldots\ldots n$

17. Create a menu driven program with the following options:

    a. Compute Compound Interest
    b. Computer Simple Interest

After each execution, the user should be prompted if he/she wants to continue. Loop should execute till the user enters 'N' or 'n' as an option.