

a. Write a program to generate different series.

1, 2, 3, 4, 5,10th

```
Cls
For i = 1 To 10
Print i;
Next i
End
```

1, 3, 5, 7,10th

```
Cls
For i = 1 To 10      Step 2
  Print i;
Next i
End
```

1, 4, 9, 16, 25, 36, ... 10th

```
Cls
For i = 1 To 10
  Print i ^ 2;
Next i
End
```

2, 8, 18, 32, 10th

```
Cls
For i = 1 To 10
  Print 2 * i ^ 2;
Next i
End
```

1, 2, 4, 7, 10th

```
Cls
s = 1
For i = 1 To 10
  Print s;
  s = s + i
Next i
End
```

5, 10, 20, 35, ... 10th

```
Cls
s = 5
For i = 5 To 100      Step 5
  Print s;
  s = s + i
Next i
End
```

1, 5, 9, 13, 17,10th

```
Cls
For i = 1 To 100      Step 4
  Print i;
Next i
End
```

1, 1, 2, 3, 7, ... 10th (Fibonacci)

```
Cls
a = 1
b = 1
Print a
For i = 1 To 10
    c = a + b
    Print c
    a = b
    b = c
Next i
End
```

b. Write a program to calculate sum of n-natural number.

```
Cls
s = 0
For i = 1 To 100
    s = s + i
Next i
Print s
End
```

c. Write a program to calculate product of n-natural number. (factorial of a given number)

```
Cls
s = 1
For i = 1 To 100
    s = s * i
Next i
Print s
End
```

d. Write a program to calculate sum of digits of a given number. Eg: 111 sum of 1+1+1 is 3

Logic: $r = n \text{ Mod } 10$

$s = s + r$

$n = n \setminus 10$

e. Write a program to calculate product of digits of a given number.

f. Write a program to reverse a given number. Eg: 123 reverse is 321

Logic: $r = n \text{ Mod } 10$

$s = s * 10 + r$

$n = n \setminus 10$

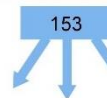
g. Write a program to check whether given number is palindrome or not. (Check whether reversed number is equal to original number or not)

h. Write a program to check whether given number is Armstrong or not.

i. WAP to reverse a string and check whether a string is palindrome or not

j. WAP to count vowels and consonant in given string.

What is an Armstrong Number



$$1^3 + 5^3 + 3^3 = 153$$