Experiment-6

Aim:- Generate a Geometric Progression (GP) Series.

Algorithm:

- 1) Assign source index a value to point at an address in RAM (let's say '0100:2000' or 2000h).
- 2) Store the value at address in RAM to the AL register (the first term), in next address in RAM to the DL register (common difference between terms) and to adjacent address in RAM to the CX register (number of terms).
- 3) Assign source index a value to point at an address in RAM to store the value of Arithmetic series (usually next row in memory window).
- 4) Create a loop 'gp', which begins with storing the value in the AL register to the address in RAM pointed by updated source index.
- Multiply the values in AL and DL register and stores the result in AL register.
- 6) Increase the value of source index, moving to next address in RAM.
- 7) Loop 'gp' ends when it reaches the value of CX and the program is halted.

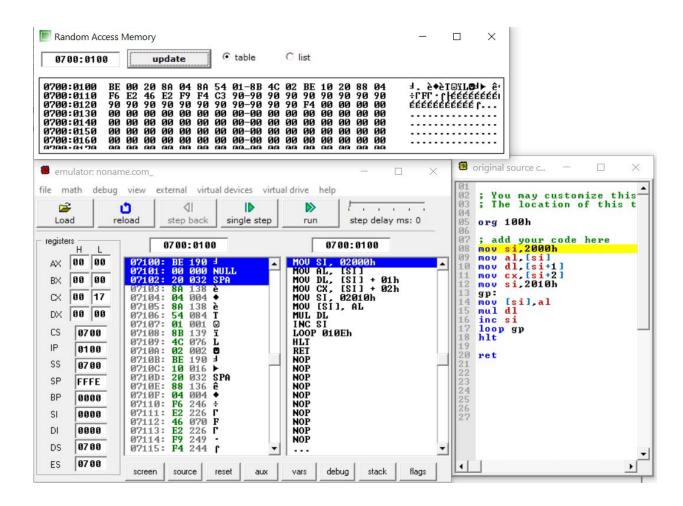
Program:

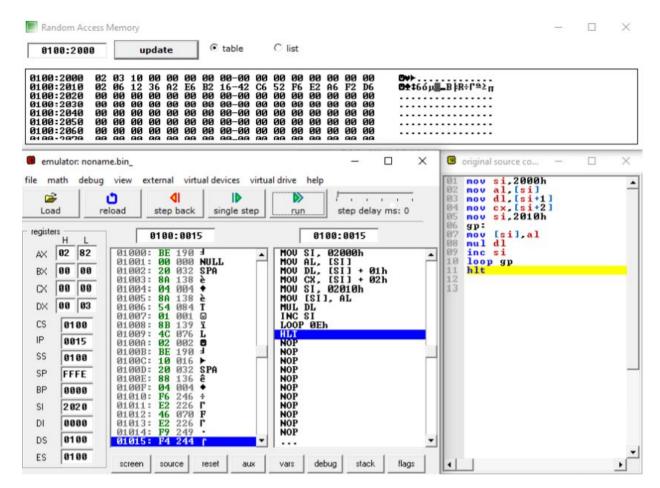
```
; You may customize this and other start-up templates;
; The location of this template is c:\emu8086\inc\0_com_template.txt

org 100h

; add your code here
mov si,2000h
mov al,[si]
mov dl,[si+1]
mov cx,[si+2]
mov si,2010h
gp:
mov [si],al
mul dl
inc si
loop gp
hlt
```

Observation:





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