Array

Program A	Program B	Program C	Program D	Program E		

.model small
.data
a db 100 dup(?)
.code
Mov AX,@data
Mov DS,AX
Lea SI,a
Mov CX,5
Mov AH,1
L1: Int 21h
Mov [SI],AL
Inc SI
Loop L1
Mov CX,5
Mov AH,2
L2:Dec SI
Mov DL,[SI]
Int 21h
Loop L2
Mov AH,76
Int 21h
End
	.model small
	.data
	a db 100 dup (?)
	.code
	Mov AX,@data
	Mov DS,AX
	Mov SI,0
	Mov AH,1
	L: Int 21h
	Mov a[SI],AL
	Inc SI
	Cmp SI,5
	JL L
	Mov SI,0
	Mov AH,2
	K:
	Mov DL,a[SI]
	Int 21h
	Inc SI
	Cmp SI,5
	JL K
	Stop End
		.model small
		.data
		a db "Give "
		db "letter:$"
		c db "next$"
		.code
		Mov AX,@data
		Mov DS,AX
		Lea DX,a
		Mov AH,9
		Int 21h
		Mov AH,1
		Int 21h
		Mov BL,AL
		Add BL,1
		Mov AH,9
		Lea DX,c
		Int 21h
		Mov DL,BL
		Mov AH,2
		Int 21h
		Stop End
			.model small
			.data
			a db 100 dup(?)
			.code
			Mov AX,@data
			Mov DS,AX
			Lea SI,a
			Mov CX,5
			Mov AH,1
			L1: Int 21h
			Mov [SI],AL
			Inc SI
			Loop L1
			Mov CL,36
			Mov [SI],CL
			Mov AH,9
			Lea DX,a
			Int 21h
			Mov AH,76
			Int 21h
			End
				.model small
				.data
				a db 69,70,75
				b dw 25665
				db 80,98,36
				.code
				Mov AX,@data
				Mov DS,AX
				Mov AH,9
				Lea DX,a
				Int 21h
				Lea SI,a
				Mov CH,71
				Mov CL,72
				Mov [SI+1],CH
				Int 21h
				Mov [SI+4],CX
				Int 21h
				Add DX,3
				Int 21h
				Stop End		

Program A: Reads 5 letters. Prints them in opposite order. Lea SI,a may be replaced by Mov SI, offset a.
Program B: Reads 5 letters. Prints them again. In place of SI one may use DI or BX also. @data may be replaced by dgroup.
Program C: Reads a letter and prints the next letter. Here proper help for input/output is given. When AH=9 then Int 21 prints a sequence of letters pointed by [DX], [DX+1] … till a letter $ (ascii 36) is found.
Program D: Read 5 letters. Print them again. Mov [SI],CL may be replaced by Mov [SI],byte ptr 36.
Program E: EFKAdPb EGKAdPb EGKAHGb AHGb Mov [SI],byte ptr 74 JFKAdPb (word ptr) J KAdPb

1. Read 10 letters. Print them again by leaving alternate letters. Input qwertyuiop output qetuo.
2. Read 10 letters. Print only capital letters. Input qFeRtyGiop output FRG.
3. Print by replacing capital by small. qFeRtyGiop $\rightarrow$ qfertygiop
4. Replace capital by small and small be capital. qFeRtyGiop $\rightarrow$ QfErTYgIOP
5. Read 9 letters and a digit (x). Output x^{th} letter. wqrtyuicd3 $\rightarrow$ r.
6. Read a number (n<9). Read n letter and output them in reverse order. 3sdr $\rightarrow$ rds 5aswer $\rightarrow$ rewsa
7. Read 5 letters. Let these be qwert output Print (A)qwert,qwer,qwe,qw,q, (B)qwert,wert,ert,rt,t, (C)qwert,qwer,qwe,qw,q,;wert,wer,we,w,;ert,er,e,;rt,r,;t,;(D)qwert,wert,ert,rt,t,;qwer,wer,er,r,;qwe,we,e,;qw,w,;q,;

In following programs use only one loop (unless permitted). Printing using AH=9 not AH=2.

8. Read 10 letters. (A) Print only first 5. (B) Last 5. (C) 3, 4^{th}, …, 7^{th}
9. Read 10 letters. (A) Print them in reverse order. (B) Print alternate letters. (C) print only capitals.
10. Read 9 letters and a digit (x). Output first 'x' letters. wqrtyuicd3 $\rightarrow$ wqr. (B)Letters after x^{th} letter. tyuicd.
11. Read 5 letters. Let these be qwert Two loops (A)qwert,wert,ert,rt,t, (B)qwert,qwer,qwe,qw,q, (C) qwert,wert,ert,rt,t,;qwer,wer,er,r,;qwe,we,e,;qw,w,;q,; (three loops)

12. Let string has number of words. Read letters till 'Z' is given. Output first word. [Hint: replace first blank (ascii 32) by '$']. Let string be "ram prasad kumar deyZ". Output is ram. [fsd er t q w eg $\rightarrow$ fsd]
13. Print last word Dey,eg. (B)Print 2nd word (prasad,er) (C)Last word in reverse order (yed,ge)(2/1loop).
14. Delete first word. prasad kumar dey er t q w eg
15. Make first letter of every word capital. Ram Prasad Kumar Dey Fsd Er T Q W Eg
16. Delete last word. [replace last blank by '$']. Output ram prasad kumar fsd er t q w.
17. Output entire string except first word. Let 'p' is the length of first word. Add (p+1) to DX.
18. Program reads 5 letter (let qwert). Program outputs them as 1th letter=q 2th letter=w … 5th letter=t use two loops (A) AH=2 permitted for printing (B) AH=2 permitted (once) (C) AH=2 not permitted.