

**Program#1: Pre/Post Operations**

```

#include<stdio.h>
#include<conio.h>
void main(){
    int a=1,b=2,c=3;
    clrscr();
    printf("Initial Values: a=%d\tb=%d\tc=%d",a,b,c);
    c=++a + ++b;
    printf("\n1.\ta=%d\tb=%d\tc=%d",a,b,c);
    c=a++ + ++a;
    printf("\n2.\ta=%d\tb=%d\tc=%d",++a,b++,++c);
    printf("\n3.\ta=%d\tb=%d\tc=%d",a++,b,c);
    a=++a + ++b + ++c;
    printf("\n4.\ta=%d\tb=%d\tc=%d",a,b,c);
    b=a++ + b++ + c++;
    printf("\n5.\ta=%d\tb=%d\tc=%d",a,b,c);
    c--a + b-- + 3;
    printf("\n6.\ta=%d\tb=%d\tc=%d",a,b,c);
    b=2*--a + b++ - 10;
    printf("\n7.\ta=%d\tb=%d\tc=%d",a,b,c);
    a = b>c? 3 + c++ : 5 - b++;
    printf("\n8.\ta=%d\tb=%d\tc=%d",a,b,c);
    c = 8 + ++b + ++b + b;
    printf("\n9.\ta=%d\tb=%d\tc=%d",a,b,c);
    getch();
}

```

**Output:**

Line	a	b	c
Initial Values:	1	2	3
1.	2	3	5
2.	5	3	7
3.	5	4	7
4.	20	5	8
5.	21	34	9
6.	20	33	57
7.	19	62	57
8.	60	62	58
9.	60	64	200

**Discussion:**

	a	b	c
Initial	1	2	3
	2	3	
			$5=(2+3)$
Step 1	2	3	5
	3		
			$6=(3+3)$
	4		
Step 2	5	3	7
		4	
Step 3	5	4	7
	6		
	7	5	8
	$20=(7+5+8)$		
Step 4	20	5	8
		$33=(20+5+8)$	
	21	34	9
Step 5	21	34	9
	20		
			$57=(20+34+3)$
		33	
Step 6	20	33	57
	19		
		$61=(2*19+33-10)$	
		62	
Step 7	19	62	57
	$60=(3+57)$		
			58
Step 8	60	62	58
		63	
		64	
			$200=(8+64+64+64)$
Step 9	60	64	200