Practical No.08

Aim: Programs based on Pointer.

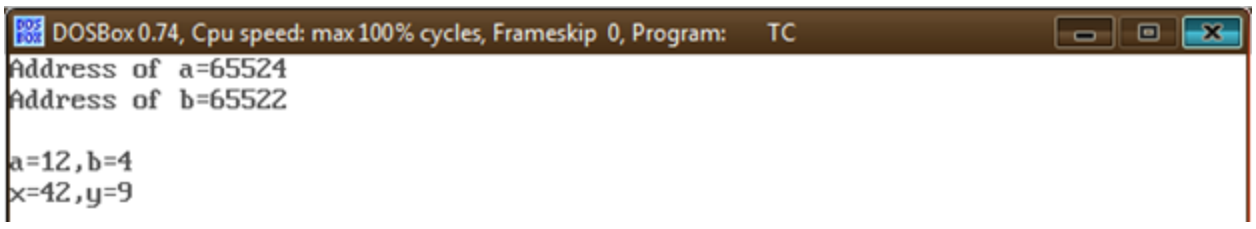
1. C Program to illustrate use of Pointer in Arithmetic Operation.

Program:

```
#include<stdio.h>
#include<conio.h>

void main()
{
    int a,b,*p1,*p2,x,y,z;

    clrscr();

    a=12;
    b=4;

    p1=&a;
    p2=&b;

    x=*p1**p2-6;
    y=4*-*p2 / *p1+10;

    printf("Address of a=%u \n",p1);
    printf("Address of b=%u \n",p2);

    printf("\n");

    printf("a=%d,b=%d\n",a,b);
    printf("x=%d,y=%d\n",x,y);

    getch();
}
```

Output:

```
Address of a=65524
Address of b=65522

a=12,b=4
x=42,y=9
```



2. C Program to Compute Sum of all Elements in Array

Program:

```
#include<stdio.h>
#include<conio.h>

void main()
```

```
{
    int *p,sum,i;
    int x[5]={5,9,6,3,7};

    clrscr();

    i=0;
    p=x;

    printf("Element value address \n");

    while(i<5)
    {
        printf("x[%d] %d %u \n",i,*p,p);
        sum=sum+*p;           //Accessing array element
        i++;
        p++;
    }

    printf("\n sum=%d \n",sum);
    printf("\n &x[0]=%u \n",&x[0]);
    printf("\n p=%u \n",p);

    getch();
}
```

Output:

```
Element value address
x[0] 5 65514
x[1] 9 65516
x[2] 6 65518
x[3] 3 65520
x[4] 7 65522

 sum=-28724

&x[0]=65514

P=65524
```