

**1. Develop a C program to perform arithmetic operations (addition, subtraction, multiplication, Division and remainder) on two integers using pointers.**

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

```
void addition(int *a,int *b,int *sum)
```

```
{
```

```
    *sum = *a + *b;
```

```
}
```

```
void subtraction(int *a,int *b,int *difference)
```

```
{
```

```
    *difference = *a - *b;
```

```
}
```

```
void multiplication(int *a,int *b,int *product)
```

```
{
```

```
    *product = (*a)*(*b);
```

```
}
```

```
void division(int *a,int *b,int *division)
```

```
{
```

```
    *division = (*a)/(*b);
```

```
}
```

```
void remainder(int *a,int *b,int *remainder)
```

```
{
```

```
    *remainder=(*a)%(*b);
```

```
}
```

```
void main()
```

```
{
```

```
    int num1,num2,c,d,e,f,g;
```

```
    printf("Enter the two numbers: ");
```

```
    scanf("%d %d",&num1,&num2);
```

```
    addition(&num1,&num2,&c);
```

```
    subtraction(&num1,&num2,&d);
```

```
multiplication(&num1,&num2,&e);
```

```
division(&num1,&num2,&f);
```

```
remainder(&num1,&num2,&g);
```

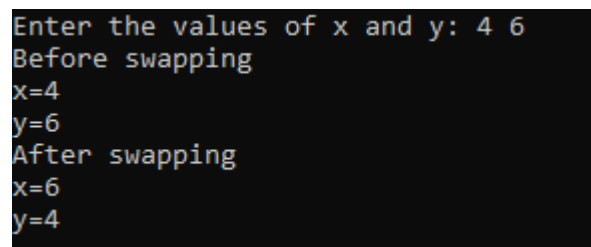
```
printf("Addition=%d\nSubtraction=%d\nMultiplication=%d\nDivision=%d\nRemainder=%d",c,d,e,f,g)  
;  
}
```

```
Enter the two numbers: 3 5  
Addition=8  
Subtraction=-2  
Multiplication=15  
Division=0  
Remainder=3
```

## 2.Illustrate pointers in swapping two numbers.

```
#include<stdio.h>

void main()
{
    int x,y,*a,*b,temp;
    printf("Enter the values of x and y: ");
    scanf("%d %d",&x,&y);
    printf("Before swapping\nx=%d\ny=%d\n",x,y);
    a=&x;
    b=&y;
    temp=*b;
    *b=*a;
    *a=temp;
    printf("After swapping\nx=%d\ny=%d\n",x,y);
}
```

A screenshot of a terminal window showing the output of the C program. The text is as follows:

```
Enter the values of x and y: 4 6
Before swapping
x=4
y=6
After swapping
x=6
y=4
```

**3.Demonstrate how to read data from the keyboard,write it to a file called BMSCE,again read the same data from the BMSCE file,and display it on the screen/console.**

```
#include<stdio.h>

void main()
{
    FILE *fp;
    char input[100];
    int i;
    fp=fopen("C:\\Users\\Admin\\Desktop\\CCP\\BMSCE.txt","w");
    printf("Enter the content to be inputted into the file: ");
    gets(input);
    fprintf(fp,"%s",input);
    fp=fopen("C:\\Users\\Admin\\Desktop\\CCP\\BMSCE.txt","r");
    printf("Data read:");
    fscanf(fp,"%s",input);
    printf("\n%s",input);
    fclose(fp);
}
```

```
Enter the content to be inputted into the file: BMSCE
Data read:
BMSCE
```