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

```
#include<stdio.h>
#include<conio.h>
void add(int *a,int *b,int *sum)
*sum=*a+*b;
}
void sub(int *a,int *b,int *diff)
{
*diff=*a-*b;
}
void mul(int *a,int *b,int *pro)
*pro=(*a)*(*b);
}
void div(int *a,int *b,int *divi)
{
*divi=(*a)/(*b);
}
void remainder(int *a,int *b,int *rem)
{
*rem=(*a)%(*b);
```

```
void main()
{
int num1,num2,c,d,e,f,g;
clrscr();
printf("\n Enter the numbers: ");
scanf("%d,%d",&num1,&num2);
add(&num1,&num2,&c);
sub(&num1,&num2,&d);
mul(&num1,&num2,&e);
div(&num1,&num2,&f);
remainder(&num1,&num2,&g);
printf("Addition=%d \n Subtraction=%d \n Multiplication=%d \n Division=%d \n
Remainder=%d",c,d,e,f,g);
getch();
}
```

## **OUTPUTS**

```
Enter the numbers: 6,4
Addition=10
Subtraction=2
Multiplication=24
Division=1
Remainder=2_
```

## 2. Illustrate pointers in swapping two number.

```
#include<stdio.h>
#include<conio.h>
void swap(int *x,int *y)
{
int t;
t=*x;
*x=*y;
*y=t;
void main()
{
int num1,num2;
clrscr();
printf("Enter the values: ");
scanf("%d,%d",&num1,&num2);
printf("Before swapping: num1 is %d and num2 is %d",num1,num2);
swap(&num1,&num2);
printf("\nAfter swapping: num1 is %d and num2 is %d",num1,num2);
getch();
}
```

## **OUTPUTS**

Enter the values: 2,3

Before swapping: num1 is 2 and num2 is 3 After swapping: num1 is 3 and num2 is 2

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>
#include<conio.h>
void main()
{
FILE * fp;
char input[100];
int i;
clrscr();
fp=fopen("C:\\TURBOC3\\BIN\\BMSCE.txt","w");
printf("\nEnter the content to be inputted into the file: ");
gets(input);
fprintf(fp,"%s",input);
fp=fopen("C:\\TURBOC3\\BIN\\BMSCE.txt","r");
printf("Data read:");
fscanf(fp,"%s",input);
printf("\n %s",input);
fclose(fp);
getch();
}
```

## **OUTPUTS**

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