

LAB PROGRAM 1:

Write a menu driven C Program to design a simple calculator which solves 10 operations - 4 Arithmetic, 4 Relational and any two of your choice. The program should loop till the user wishes to stop.

```
#include<stdio.h>

int main()
{
    int x,y,z,i;
    while(1)
    {
        printf("choose on desired operation: \n");
        printf("addition:\n");
        printf("subtraction: \n");
        printf("multiplication: \n");
        printf("division: \n");
        printf("modulus: \n");
        printf("greater number: \n");
        printf("lesser number: \n");
        printf("equal: \n");
        printf("not equal: \n");
        printf("increment: \n");
```

```
scanf("%d",&i);
printf("enter any two numbers to perform operation:\n");
scanf("%d%d",&x,&y);
switch(i)
{
    case 1: printf("%d+%d=%d",x,y,x+y);
    break;
    case 2: printf("%d-%d=%d",x,y,x-y);
    break;
    case 3: printf("%d*%d=%d",x,y,x*y);
    break;
    case 4: printf("%d/%d=%d",x,y,x/y);
    break;
    case 5: printf("%dmod%d=%d",x,y,x%y);
    break;
    case 6: if(x>y)
    {
        printf("%d>%d",x,y);
    }
    else
    {
        printf("%d>%d", y,x);
    }
    break;
    case 7: if(x<y)
    {
```

```
        printf("%d<%d",x,y);
    }
    else
    {
        printf("%d<%d",y,x);
    }
    break;
case 8: if(x==y)
    {
        printf("%d=%d",x,y);
    }
    else
    {
        printf("%d!=%d",x,y);
    }
    break;
case 9: if(x!=y)
    {
        printf("%d!=%d",x,y);
    }
    else
    {
        printf("%d=%d",x,y);
    }
    break;
case 10:
```

```
    printf("%d++=%d",x,x+1);
    printf("%d++=%d",y,y+1);
    break;
    default:printf("wrong input");

}

printf("\npress 1 to perform calculation again\n press any letter to
exit\n");
scanf("%d",&z);
if(z!=1)
{
    break;
}
}
}
```

```
choose on desired operation:
addition:
subtraction:
multiplication:
division:
modulus:
greater number:
lesser number:
equal:
not equal:
increment:
1
enter any two numbers to perform operation:
5 6
5+6=11
press 1 to perform calculation again
press any letter to exit
1
choose on desired operation:
addition:
subtraction:
multiplication:
division:
modulus:
greater number:
lesser number:
equal:
```

LAB PROGRAM 2:

Write a C program to accept three numbers from the user. Find the greater two among

the three and pass them as parameters to the user defined functions given below.

a. sumaver (...) which finds the sum and average of the two numbers. Print the

sum and return the average.

b. printeven (...) which prints all the even numbers between the given two numbers

```
Include<stdio.h>
int sumaver (int a,int b)
{
    int sum;
    sum=a+b;
    printf("Sum= %d \n",sum);
    return sum/2;
}
void printeven(int a,int b)
{
    int smaller,larger;
    if(a>b)
    {
        smaller=b;
        larger=a;
    }
    else
    {
        smaller=a;
        bigger=b;
    }
    printf("Even numbers between two numbers are:\n");
    int i;
    for(i=smaller+1;i<larger;i++)
    {
        if(i%2==0)
        printf("%d \n",i);
    }
}
int main()
{
    int a,b,c,avrg,l1,l2;
    printf("Enter three numbers:\n");
```

```

scanf("%d%d%d",&a,&b,&c);
if(c<a && c<b)
{
l1=a;
l2=b;
}
else if(b<a && b<c)
{
l1=a;
l2=c;
}
else
{
l1=b;
l2=c;
}
avrg=sumaver(l1,l2);
printf("Average of two numbers is : %d \n",avrg);
prnteven(l1,l2);
}

```

```

Enter three numbers:
1 2 3
Sum= 5
Average of two numbers is : 2
Even numbers between two numbers are:

```