Program:

```c
// Write a C program to create simple calculator using functions.

#include<stdio.h>
#include<conio.h>
#include<math.h>
int num1, num2;

void setData()
{
    printf("\n\t\tEnter First Number : ");
    scanf("%d", &num1);

    printf("\t\tEnter Second Number : ");
    scanf("%d", &num2);
}

void setSingalData()
{
    printf("\n\t\tEnter a Number : ");
    scanf("%d", &num1);
}

int main()
{
    char c;

    do
    {
        system("cls");
        int choice;
             printf("\n1  ADDITION\t2  SUBSTRACTION\t3  MULTIPLICATION\t4
DIVISION\t5 MODULUS\n6 SQUARE\t7 SQUARE ROOT\t8 LOG\t\t\t9 CUBE\t\t10 CUBE
ROOT\n");

        printf("\n\t\tEnter Your Choice : ");
        scanf("%d", &choice);

        switch(choice)
        {
            case 1 :
                printf("\t\t\t--- ADDITION ---");
                setData();
                printf("\n\t\tADDITION OF %d & %d is %d", num1, num2, (num1
+ num2));
                break;
```

```
            case 2 :
                printf("\t\t\t--- SUBSTRACTION ---");
                setData();
                 printf("\n\t\tSUBSTRACTION OF %d & %d is %d", num1, num2,
(num1 - num2));
                break;

            case 3 :
                printf("\t\t\t--- MULTIPLICATION ---");
                setData();
                printf("\n\t\tMULTIPLICATION OF %d & %d is %d", num1, num2,
(num1 * num2));
                break;

            case 4 :
                printf("\t\t\t--- DIVISION ---");
                setData();
                printf("\n\t\tQUOTIENT OF %d & %d is %d", num1, num2, (num1
/ num2));
                break;

            case 5 :
                printf("\t\t\t--- MODULUS ---");
                setData();
                printf("\n\t\tREMAINDER OF %d & %d is %d", num1, num2, (num1
% num2));
                break;

            case 6 :
                printf("\t\t\t--- SQUARE ---");
                setSingalData();
                printf("\n\t\tSQUARE OF %d is %d", num1, (num1 * num1));
                break;

            case 7 :
                printf("\t\t\t--- SQUARE ROOT ---");
                setSingalData();
                printf("\n\t\tSQUARE ROOT OF %d is %f", num1, sqrt(num1));
                break;

            case 8 :
                printf("\t\t\t--- LOG ---");
                setSingalData();
                printf("\n\t\tLOG OF %d is %f", num1, log(num1));
                break;
```

```
            case 9 :
                printf("\t\t\t--- CUBE ---");
                setSingalData();
               printf("\n\t\tCUBE OF %d is %d", num1, (num1 * num1 * num1));
                break;

            case 10 :
                printf("\t\t\t--- CUBE ROOT ---");
                setSingalData();
                printf("\n\t\tCUBE ROOT OF %d is %f", num1, cbrt(num1));
                break;

            default:
                printf("\t\tInvalid Choice...");
        }

        printf("\n\nDo you want to repeart Operation ? (Y | N) : ");
        scanf(" %c",&c);
        // printf("%c", c);

    } while( c == 'Y' || c == 'y');

    return 0;
}
```

Output :

```
PROBLEMS    OUTPUT    TERMINAL    PORTS    DEBUG CONSOLE


1 ADDITION      2 SUBSTRACTION  3 MULTIPLICATION        4 DIVISION      5 MODULUS
6 SQUARE        7 SQUARE ROOT   8 LOG                   9 CUBE          10 CUBE ROOT

                Enter Your Choice : 1
                        --- ADDITION ---
                Enter First Number : 10
                Enter Second Number : 55

                ADDITION OF 10 & 55 is 65

Do you want to repeart Operation ? (Y | N) : y
```

```
1 ADDITION      2 SUBSTRACTION  3 MULTIPLICATION        4 DIVISION      5 MODULUS
6 SQUARE        7 SQUARE ROOT   8 LOG                   9 CUBE          10 CUBE ROOT

                Enter Your Choice : 2
                        --- SUBSTRACTION ---
                Enter First Number : 22
                Enter Second Number : 23

                SUBSTRACTION OF 22 & 23 is -1

Do you want to repeart Operation ? (Y | N) : y
```

```
1 ADDITION      2 SUBSTRACTION  3 MULTIPLICATION        4 DIVISION      5 MODULUS
6 SQUARE        7 SQUARE ROOT   8 LOG                   9 CUBE          10 CUBE ROOT

                Enter Your Choice : 3
                        --- MULTIPLICATION ---
                Enter First Number : 80
                Enter Second Number : 2

                MULTIPLICATION OF 80 & 2 is 160

Do you want to repeart Operation ? (Y | N) : y
```

```
1 ADDITION      2 SUBSTRACTION  3 MULTIPLICATION        4 DIVISION      5 MODULUS
6 SQUARE        7 SQUARE ROOT   8 LOG                   9 CUBE          10 CUBE ROOT

                Enter Your Choice : 4
                        --- DIVISION ---
                Enter First Number : 42
                Enter Second Number : 20

                QUOTIENT OF 42 & 20 is 2

Do you want to repeart Operation ? (Y | N) : Y
```

```
1 ADDITION      2 SUBSTRACTION  3 MULTIPLICATION        4 DIVISION      5 MODULUS
6 SQUARE        7 SQUARE ROOT   8 LOG                   9 CUBE          10 CUBE ROOT

                Enter Your Choice : 5
                        --- MODULUS ---
                Enter First Number : 85
                Enter Second Number : 10

                REMAINDER OF 85 & 10 is 5

Do you want to repeart Operation ? (Y | N) : y
```

```
1 ADDITION      2 SUBSTRACTION  3 MULTIPLICATION        4 DIVISION      5 MODULUS
6 SQUARE        7 SQUARE ROOT   8 LOG                   9 CUBE          10 CUBE ROOT

                Enter Your Choice : 6
                        --- SQUARE ---
                Enter a Number : 5

                SQUARE OF 5 is 25

Do you want to repeart Operation ? (Y | N) : y
```

```
1 ADDITION      2 SUBSTRACTION  3 MULTIPLICATION        4 DIVISION      5 MODULUS
6 SQUARE        7 SQUARE ROOT   8 LOG                   9 CUBE          10 CUBE ROOT

                Enter Your Choice : 7
                        --- SQUARE ROOT ---
                Enter a Number : 24

                SQUARE ROOT OF 24 is 4.898979

Do you want to repeart Operation ? (Y | N) : y
```

```
1 ADDITION      2 SUBSTRACTION  3 MULTIPLICATION        4 DIVISION      5 MODULUS
6 SQUARE        7 SQUARE ROOT   8 LOG                   9 CUBE          10 CUBE ROOT

                Enter Your Choice : 8
                        --- LOG ---
                Enter a Number : 10

                LOG OF 10 is 2.302585

Do you want to repeart Operation ? (Y | N) : y
```

```
1 ADDITION      2 SUBSTRACTION  3 MULTIPLICATION        4 DIVISION      5 MODULUS
6 SQUARE        7 SQUARE ROOT   8 LOG                   9 CUBE          10 CUBE ROOT

                Enter Your Choice : 9
                        --- CUBE ---
                Enter a Number : 9

                CUBE OF 9 is 729

Do you want to repeart Operation ? (Y | N) :
```

```
1 ADDITION      2 SUBSTRACTION  3 MULTIPLICATION        4 DIVISION      5 MODULUS
6 SQUARE        7 SQUARE ROOT   8 LOG                   9 CUBE          10 CUBE ROOT

                Enter Your Choice : 10
                        --- CUBE ROOT ---
                Enter a Number : 546

                CUBE ROOT OF 546 is 8.173302

Do you want to repeart Operation ? (Y | N) : y
```