```c
/* Fig. 2.1: fig02_01.c
A first program in C */
#include <stdio.h>
#include <math.h>
/*PART A*/


/* function main begins program execution */
int main(void)

/*Problem 1*/
{
    printf("Welcome to C!\n");

/*Problem 2*/


    printf("wELCOME");
printf("TO c!\n");

/*function main begins program execution*/

/*Problem 3*/
/*Fig .2.4: fig2_04.c
Printing multiple lines with a single printf */
printf("Welcome\n to \n C! \n");


/*Problem 4*/
int integer1;/*first number to be given by user*/
int integer2;/*second number to be given by user*/
int sum;/*variable in which sum is stored*/
int Multiply;
int D;
float p;
int Sub;
printf("Enter first integer\n");
/*prompt*/
scanf("%d",&integer1);/*read an integer*/
 printf("Enter the second integer\n");/*read a second integer*/
scanf("%d",&integer2);
sum = integer1+integer2;/*assign total to sum*/
printf("sum is %d\n",sum); /*print sum*/


/*Part B*/

/*A*/
printf("Name: Vishnu Sai Varshith Kaki\n");
printf("Roll No.:076\n");
printf("Branch: Computer Science and Engineering\n");
printf("GroupNO:CP\n");
printf("Part 2\n");
/*B*/
/*Add*/
printf("ADD\n");
printf("NUmber 1\n");
```

```c
/*prompt*/
scanf("%d",&integer1);/*read an integer*/
 printf("Number 2\n");/*read a second integer*/
scanf("%d",&integer2);
sum = integer1+integer2;/*assign total to sum*/
printf("sum is %d\n",sum); /*print sum*/


/*Sub*/
printf("Subtraction\n");
printf("NUmber 1\n");
/*prompt*/
scanf("%d",&integer1);/*read an integer*/
 printf("Number 2\n");/*read a second integer*/
scanf("%d",&integer2);
Sub = integer1-integer2;/*assign total to sum*/
printf("After Subtracting Num1 from Num2 We Get %d\n",Sub); /*print
sum*/

/*Multiply*/
printf("MULTIPLY\n");
printf("NUmber 1\n");
/*prompt*/
scanf("%d",&integer1);/*read an integer*/
 printf("Number 2\n");/*read a second integer*/
scanf("%d",&integer2);
Multiply = integer1*integer2;/*assign total to sum*/
printf("After multiplying Num1 from Num2 We Get %d\n",Multiply);
/*print sum*/

/*Divide*/
printf("Divide\n");
printf("NUmber 1\n");
/*prompt*/
scanf("%d",&integer1);/*read an integer*/
 printf("Number 2\n");/*read a second integer*/
scanf("%d",&integer2);
D = integer1/integer2;/*assign total to sum*/
printf("After Dividing Num1 by 2 We get %d\n",D); /*print sum*/

/*Modulus*/
printf("Modulus\n");
printf("NUmber 1\n");
/*prompt*/
scanf("%d",&integer1);/*read an integer*/
 printf("Number 2\n");/*read a second integer*/
scanf("%d",&integer2);
D = integer1%integer2;/*assign total to sum*/
printf("Modulus Num1 by 2 We get %d\n",D); /*print sum*/


/*C*/
printf("Finding Hypotenuse\n");
printf("Enter Height\n");
/*prompt*/
scanf("%d",&integer1);/*read an integer*/
 printf("Enter Base\n");/*read a second integer*/
```

```c
    scanf("%d",&integer2);
    D = integer1*integer1+integer2*integer2;/*assign total to sum*/
    p = sqrt(D);


    printf("\nHypotenuse == %f\n",p);

    /*D*/
    printf("Sum of 100 numbers of an Ap \n");
    printf("Enter First term\n");
    /*prompt*/
    scanf("%d",&integer1);/*read an integer*/
     printf("Enter Second Term\n");/*read a second integer*/
    scanf("%d",&integer2);
    D = integer2-integer2;/*assign total to sum*/
    printf("Common Difference is %d\n",D); /*print sum*/
    Sub = 50*((2*integer1)+49*D);
    printf("Sum of 100 numbers of this AP is %d\n",Sub);



    return 0; /*indicate that program ended successfully */
} /* end function main */
```