

EXPERIMENT-2

(OPERATORS)

QUESTION-1: Write a C program to calculate the area and perimeter of a rectangle based on its length and width.

CODE:

```
//WRITE A C PROGRAM TO CALCULATE THE AREA AND PERIMETER OF A  
RECTANGLE BASED ON ITS LENGTH AND WIDTH
```

```
#include <stdio.h>  
int main()  
{  
    float length,width,area,perimeter;//declaration  
    printf("Enter the length of a rectangle: ");  
    scanf("%f", &length);  
    printf("Enter the width of a rectangle: ");  
    scanf("%f", &width);  
    if(length&&width>0)  
    {  
        area=length*width;//calculating area  
        perimeter=2*(length+width);//calculating perimeter  
        printf("Area of reactangle= %f\n", area);//displaying area  
        printf("Perimeter of rectangle=%f\n",perimeter);//displaying perimeter  
  
    }  
    else  
    {  
        printf("Invalid Input");  
    }  
    return 0;  
}
```

OUTPUT 1:

Enter the length of a rectangle: -532

Enter the width of a rectangle: -322

Invalid Input

OUTPUT 2:

Enter the length of a rectangle: 0

Enter the width of a rectangle: 213

Invalid Input

OUTPUT 3:

Enter the length of a rectangle: 223.2

Enter the width of a rectangle: 2.123

Area of reactangle= 473.853577

Perimeter of rectangle= 450.645996

QUESTION-2: Write a C program to Convert temperature from Celsius to Fahrenheit using the formula: $F = (C * 9/5) + 32$.

CODE:

```
//WRITE A C PROGRAM TO CONVERT TEMPERATURE FROM CELCIUS TO FAHRENHEIT USING THE FORMULA: F=(C*9/5)+32.
```

```
#include <stdio.h>
int main()
{
float celsius, fahrenheit;//declaration/printf("Enter temperature in Celsius: ");
scanf("%f", &celsius);
fahrenheit = (celsius * 9 / 5) + 32;//converting into fahrenheit
printf("Temperature in Fahrenheit = %.2f\n", fahrenheit);//displaying output
return 0;
}
```

OUTPUT 1:

Enter temperature in Celsius: 0

Temperature in Fahrenheit = 32.00

OUTPUT 2:

Enter temperature in Celsius: -323

Temperature in Fahrenheit = -549.40