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EXPERIMENT 2 : OPERATORS

Activity 1: WAP a C program to calculate the area and perimeter of a rectangle based on its length and width.

ALGORITHM

STEP1: Start

STEP2: Declare variables length, width, area, perimeter

STEP3: Read length, width

STEP4: area = length * width

STEP5: perimeter = 2 * (length + width)

STEP6: Print area, perimeter

STEP7: End

PSEUDOCODE :

START

Declare float length, width, area, perimeter

Print "Enter length: "

Input length

Print "Enter width: "

Input width

*area = length * width*

*perimeter = 2 * (length + width)*

Print "Area =", area

Print "Perimeter =", perimeter

END

CODE :

```
#include <stdio.h>
```

```
int main() {
```

```
    float length, width, area, perimeter;
```

```
    printf("Enter length of the rectangle: ");
```

```
    scanf("%f", &length);
```

```
    printf("Enter width of the rectangle: ");
```

```
    scanf("%f", &width);
```

```
    area = length * width;
```

```
    perimeter = 2 * (length + width);
```

```

printf("Area of Rectangle: %.2f\n", area);
printf("Perimeter of Rectangle: %.2f\n", perimeter);

return 0;
}

```

OUTPUT:

The screenshot shows a terminal window with the following text:

```

PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS

PS E:\Cprogramming works\LAB REPORT CODE> gcc .\Rectangle.c
PS E:\Cprogramming works\LAB REPORT CODE> .\a.exe
Enter length of the rectangle: 15
Enter width of the rectangle: 12
Area of Rectangle: 180.00
Perimeter of Rectangle: 54.00
PS E:\Cprogramming works\LAB REPORT CODE> []

```

Activity 2: WAP a C program to convert the temperature from Celsius to Fahrenheit using the formula : $F = (C * 9/5) + 32$.

ALGORITHM :

STEP1: Start

STEP2: Declare variables celsius, fahrenheit

STEP3: Read celsius

STEP4: fahrenheit = (celsius * 9 / 5) + 32

STEP5: Print fahrenheit

STEP6: End

PSEUDOCODE:

START

Declare float celsius, fahrenheit

Print "Enter temperature in Celsius: "

Input celsius

*fahrenheit = (celsius * 9 / 5) + 32*

Print "Temperature in Fahrenheit = ", fahrenheit

END

CODE :

```
#include <stdio.h>
```

```
int main() {
```

```
    float celsius, fahrenheit;
```

```
    printf("Enter temperature in Celsius: ");
```

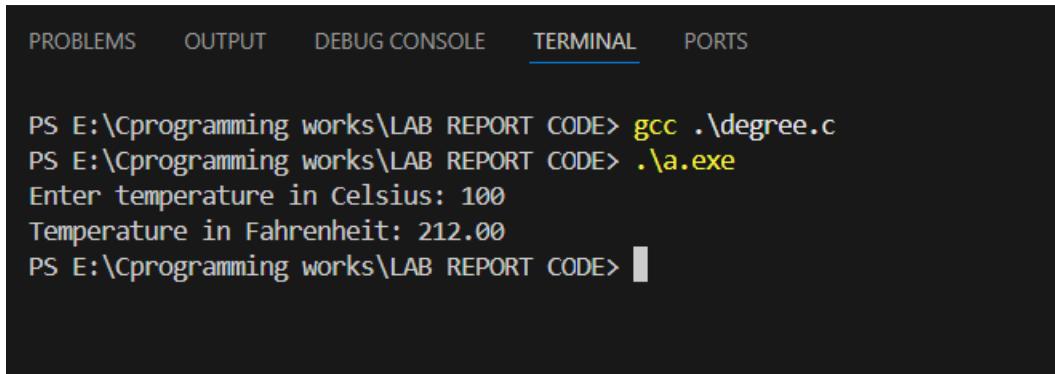
```
    scanf("%f", &celsius);
```

```
    fahrenheit = (celsius * 9 / 5) + 32;
```

```
printf("Temperature in Fahrenheit: %.2f\n", fahrenheit);

return 0;
}
```

OUTPUT :



The screenshot shows a terminal window with the following text:

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS

PS E:\Cprogramming works\LAB REPORT CODE> gcc .\degree.c
PS E:\Cprogramming works\LAB REPORT CODE> .\a.exe
Enter temperature in Celsius: 100
Temperature in Fahrenheit: 212.00
PS E:\Cprogramming works\LAB REPORT CODE>
```