



# Programming In C Lab File

Subject Code: 16BCA1C05L  
Class: I Year I Semester (BCA)

Experiments No.: 1 to 6

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## **Experiment 01:**

*C program to display Your Name, Address and City in different lines.*

### **Code:**

```
#include<stdio.h>
int main()
{
    printf("\n C program to display Your Name,
    Address and City in different lines. - By
    Suman Garai \n");
    printf("\n Name: Jain University");
    printf("\n Address: Jayanagar");
    printf("\n City: Bengaluru \n");
    return 0;
}
```

### **Output:**



```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL 2: Code
c:\Users\HOME\Desktop>cd "c:\Users\HOME\Desktop\" && g++ cppprogram.cpp -o cppprogram && "c:\Users\HOME\Desktop\"cppprogram

C program to display Your Name, Address and City in different lines. - By Suman Garai

Name: Jain University
Address: Jayanagar
City: Bengaluru

c:\Users\HOME\Desktop>
```

## **Experiment 02:**

*C program to find the area and circumference of a circle.*

### **Code:**

```
#include<stdio.h>
int main()
{
    printf("\n C program to find the area and
    circumference of acircle. - BY Suman Garai");
    int r;
    float a,c;
    printf("\n Enter the radius: ");
    scanf("%d",&r);
    a = ( 3.14 * r * r );
    c = ( 2 * 3.14 * r );
    printf("\n Area of the Circle: %f", a);
    printf("\n Circumference of the Circle: %f
    \n", c);
    return 0;
}
```

### **Output:**



The screenshot shows a terminal window with the following content:

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
2: Code
c:\Users\HOME\Desktop>cd "c:\Users\HOME\Desktop\" && g++ cppprogram.cpp -o cppprogram && "c:\Users\HOME\Desktop\"cppprogram
C program to find the area and circumference of acircle. - BY Suman Garai
Enter the radius: 5

Area of the Circle: 78.500000
Circumference of the Circle: 31.400000
c:\Users\HOME\Desktop>
```

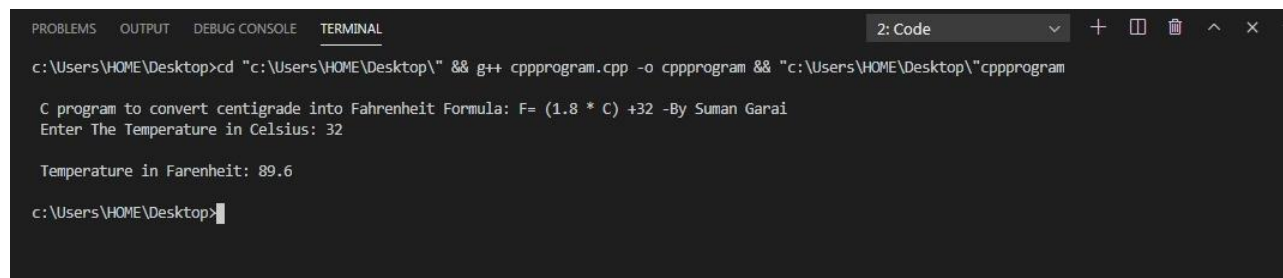
### Experiment 03:

*C program to convert centigrade into Fahrenheit. Formula:  $F = (1.8 * C) + 32$ .*

### Code:

```
#include<stdio.h>
int main()
{
    printf("\n C program to convert centigrade into
    Fahrenheit Formula:  $F = (1.8 * C) + 32$  -By Suman
    Garai");
    int c;
    float f;
    printf("\n Enter The Temperature in Celsius:
    ");
    scanf("%d", &c);
    f = (1.8 * c) + 32;
    printf("\n Temperature in Farenheit: %g \n",
    f);
    return 0;
}
```

### Output:



The screenshot shows a terminal window with the following content:

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL 2: Code
c:\Users\HOME\Desktop>cd "c:\Users\HOME\Desktop\" && g++ cppprogram.cpp -o cppprogram && "c:\Users\HOME\Desktop\"cppprogram

C program to convert centigrade into Fahrenheit Formula:  $F = (1.8 * C) + 32$  -By Suman Garai
Enter The Temperature in Celsius: 32

Temperature in Farenheit: 89.6

c:\Users\HOME\Desktop>
```

## Experiment 04a:

*C program to swap variable values of two variables using a temporary variable.*

### Code:

```
#include<stdio.h>
int main()
{
    int a, b, c;
    printf("\n C program to swap variable values of
    two variables using a temporary variable. -By
    Suman Garai");
    printf("\n Enter the values of a & b: ");
    scanf("%d%d", &a,&b);
    c = a;
    a = b;
    b = c;
    printf("\n Value of A: %d", a);
    printf("\n Value of B: %d \n", b);
    return 0;
}
```

### Output:



The screenshot shows a terminal window with the following content:

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL 2: Code
c:\Users\HOME\Desktop>cd "c:\Users\HOME\Desktop\" && g++ cppprogram.cpp -o cppprogram && "c:\Users\HOME\Desktop\"cppprogram

C program to swap variable values of two variables using a temporary variable. -By Suman Garai
Enter the values of a & b: 7,4

Value of A: 4
Value of B: 7

c:\Users\HOME\Desktop>
```

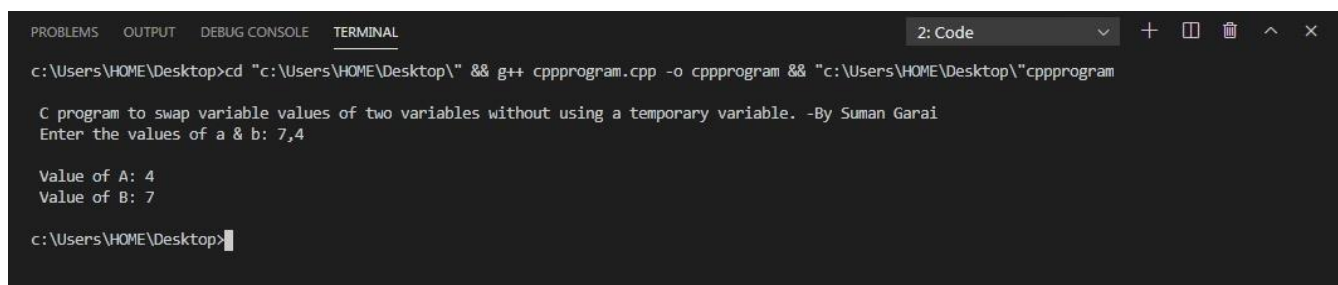
## **Experiment 04b:**

*C program to swap variable values of two variables without using a temporary variable*

### **Code:**

```
#include<stdio.h>
int main()
{
    int a, b;
    printf("\n C program to swap variable values of two
    variables without using a temporary variable. -By
    Suman Garai");
    printf("\n Enter the values of a & b: ");
    scanf("%d,%d", &a,&b);
    printf("\n Value of A: %d", b);
    printf("\n Value of B: %d \n", a);
    return 0;
}
```

### **Output:**



```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL 2: Code
c:\Users\HOME\Desktop>cd "c:\Users\HOME\Desktop\" && g++ cppprogram.cpp -o cppprogram && "c:\Users\HOME\Desktop\"cppprogram

C program to swap variable values of two variables without using a temporary variable. -By Suman Garai
Enter the values of a & b: 7,4

Value of A: 4
Value of B: 7

c:\Users\HOME\Desktop>
```

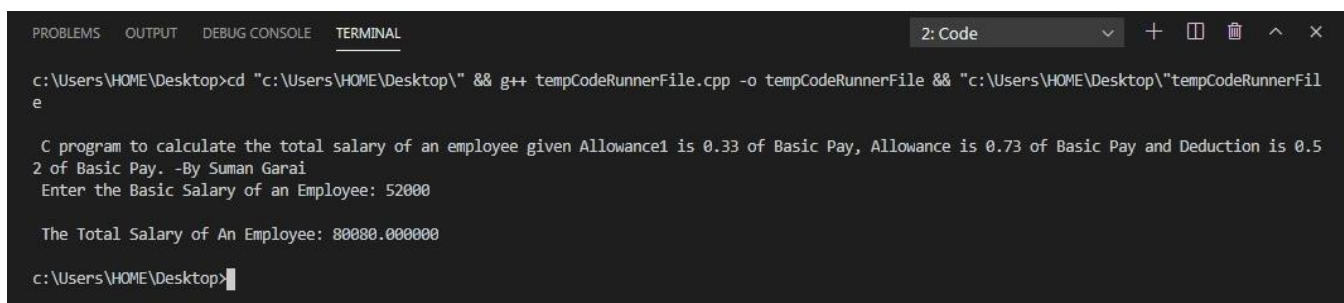
## Experiment 05:

*C program to calculate the total salary of an employee given Allowance1 is 33% of Basic Pay, Allowance2 is 73% of Basic Pay and Deduction is 52% of Basic Pay.*

## Code:

```
#include<stdio.h>
int main()
{
    int bs;
    double ts;
    printf("\n C program to calculate the total salary
    of an employee given Allowance1 is 0.33 of Basic
    Pay, Allowance is 0.73 of Basic Pay and Deduction
    is 0.52 of Basic Pay. -By Suman Garai");
    printf("\n Enter the Basic Salary of an Employee:
    ");
    scanf("%d", &bs);
    ts = bs + 0.33 * bs + 0.73 * bs - 0.52 * bs;
    printf("\n The Total Salary of An Employee: %f \n",
    ts);
    return 0;
}
```

## Output:



The screenshot shows a terminal window with the following content:

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL 2: Code
c:\Users\HOME\Desktop>cd "c:\Users\HOME\Desktop\" && g++ tempCodeRunnerFile.cpp -o tempCodeRunnerFile
e
C program to calculate the total salary of an employee given Allowance1 is 0.33 of Basic Pay, Allowance is 0.73 of Basic Pay and Deduction is 0.5
2 of Basic Pay. -By Suman Garai
Enter the Basic Salary of an Employee: 52000

The Total Salary of An Employee: 80080.000000

c:\Users\HOME\Desktop>
```

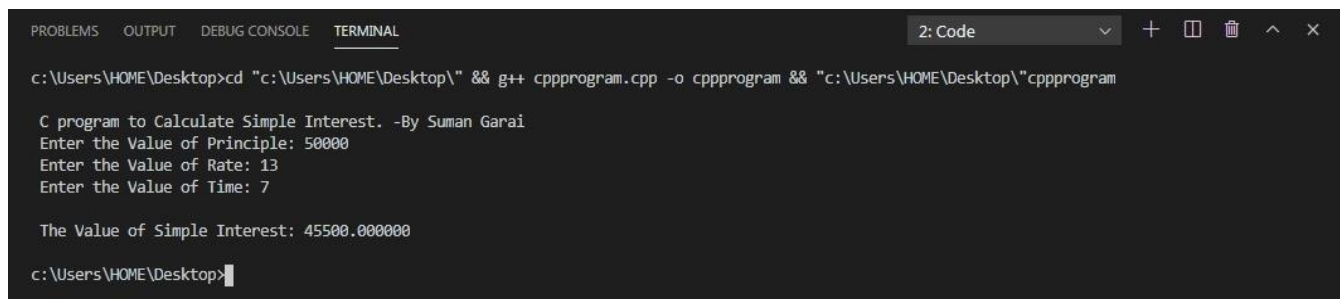
## Experiment 06:

*C program to Calculate Simple Interest.*

### Code:

```
#include<stdio.h>
int main()
{
    int p, r, t;
    double si;
    printf("\n C program to Calculate Simple Interest. -By Suman Garai");
    printf("\n Enter the Value of Principle: ");
    scanf("%d", &p);
    printf(" Enter the Value of Rate: ");
    scanf("%d", &r);
    printf(" Enter the Value of Time: ");
    scanf("%d", &t);
    si = (p * r * t) / 100;
    printf("\n The Value of Simple Interest: %f\n", si);
    return 0;
}
```

### Output:



The screenshot shows a terminal window with the following content:

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL 2: Code
c:\Users\HOME\Desktop>cd "c:\Users\HOME\Desktop\" && g++ cppprogram.cpp -o cppprogram && "c:\Users\HOME\Desktop\"cppprogram

C program to Calculate Simple Interest. -By Suman Garai
Enter the Value of Principle: 50000
Enter the Value of Rate: 13
Enter the Value of Time: 7

The Value of Simple Interest: 45500.000000

c:\Users\HOME\Desktop>
```



-- THE END --