

### **Program 1:**

```
// Program to swap two numbers using temporary variable

#include<stdio.h>
int main(){
    int num1,num2,temp;
    printf("Enter Two Numbers:\n");
    scanf("%d %d",&num1,&num2);

    printf("\nThe Value of Num 1 is: %d\nThe Value of Num 2 is: %d\n",num1,num2);

    temp=num1;
    num1=num2;
    num2=temp;

    printf("\nThe Value of Num 1 after swap is: %d\nThe Value of Num 2 after swap is: %d\
n",num1,num2);
}
```

```
vipul@whiplash:~/Codes/Practicals$ ./swap_output
Enter Two Numbers:
10
20

The Value of Num 1 is: 10
The Value of Num 2 is: 20

The Value of Num 1 after swap is: 20
The Value of Num 2 after swap is: 10
```

## **Program 2:**

```
// Program to swap two numbers without using temporary variable

#include<stdio.h>
int main(){
    int num1,num2;
    printf("Enter Two Numbers:\n");
    scanf("%d %d",&num1,&num2);

    num1=num1+num2;
    num2=num1-num2;
    num1=num1-num2;

    printf("\nThe Value of Num 1 after swap is: %d\nThe Value of Num 2 after swap is %d\
n",num1,num2);
}
```

```
vipul@whiplash:~/Codes/Practicals$ ./swap_notemp_output
Enter Two Numbers:
12
56

The Value of Num 1 after swap is: 56
The Value of Num 2 after swap is: 12
```

### **Program 3:**

```
// Program to Convert Temperature from Celcius to Fahrenheit

#include<stdio.h>
int main(){
    float celcius,fahrenheit;
    printf("Enter Temperature in celcius:\n");
    scanf("%f",&celcius);
    fahrenheit=(celcius*9/5)+32;
    printf("\nThe temperature in fahrenheit= %f\n",fahrenheit);
}
```

```
vipul@whiplash:~/Codes/Practicals$ ./convert_temp_output
Enter Temperature in celcius:      fahrenheit=(celcius*9/5)
37.5                                printf("\nThe temperatur
                                         )
The temperature in fahrenheit= 99.500000
```

#### **Program 4:**

```
// Program to calculate volume of cylinder

#include<stdio.h>
int main(){
    float radius,height,volume;
    printf("Enter the radius & height of cylinder:\n");
    scanf("%f %f",&radius,&height);

    volume=3.14159*radius*radius*height;

    printf("\nThe Volume of The Cylinder = %f\n",volume);
}
```

```
vipul@whiplash:~/Codes/Practicals$ ./vol_cylinder_output
Enter the radius & height of cylinder:
15
12

The Volume of The Cylinder = 8482.292969
```

### **Program 5:**

```
// Program to calculate sum of 5 subjects and calculate percentage

#include<stdio.h>
int main(){
    float subjects[5],sum=0,percentage;
    printf("Enter marks of 5 subjects:\n");
    for(int i=0;i<5;i++){
        scanf("%f",&subjects[i]);
        sum+=subjects[i];
    }
    percentage=sum/5;

    printf("\nThe Sum of the 5 subjects = %f\nThe Percentage = %f\n",sum,percentage);
}
```

```
vipul@whiplash:~/Codes/Practicals$ ./subject_sum_percentage_output
Enter marks of 5 subjects: 90
90
87
65
77
92

The Sum of the 5 subjects = 411.000000
The Percentage = 82.199997
```

### **Program 6:**

```
// Program to input distance between two cities in km. and convert to meters and centimeters

#include<stdio.h>
int main(){
    float distance,meters,centimeters;
    printf("Enter the distance between two cities in km:\n");
    scanf("%f",&distance);

    meters=distance*1000;
    centimeters=meters*100;

    printf("\nThe Distance in meters= %f\nThe Distance in centimeters= %f\n",
n",meters,centimeters);
}
```

```
vipul@whiplash:~/Codes/Practicals$ ./distance_convert_output
Enter the distance between two cities in km:
549

The Distance in meters= 549000.000000
The Distance in centimeters= 54900000.000000
vipul@whiplash: ~/Codes/Practicals$
```