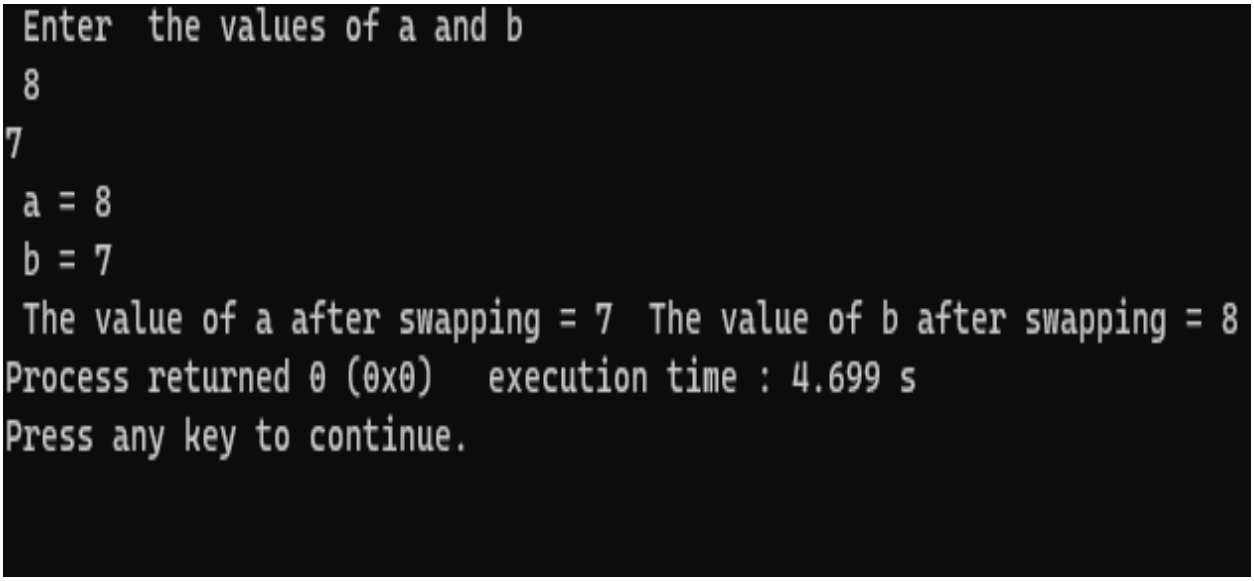
1) Swap two numbers using temporary variable

Input :

```
#include <stdio.h>


int main () {
      int a,b,c ;
      printf ( " Enter  the values of a and b \n ") ;
      scanf ( "%d%d",&a,&b) ;
      printf ( " a = %d \n",a ) ;
      printf ( " b = %d \n",b) ;
c = a ;
a = b ;
b = c ;


    printf ( " The value of a after swapping = %d ",a) ;
    printf ( " The value of b after swapping = %d ",b )  ;


    return 0 ;
}
```

Output :


Enter the values of a and b
8
7
a = 8
b = 7
The value of a after swapping = 7 The value of b after swapping = 8
Process returned 0 (0x0) execution time : 4.699 s
Press any key to continue.

2) Swap two numbers without using temperary variable

Input :

```
#include <stdio.h>


 int main ()

 {

    int a,b,c ;

    printf ( " Enter the value of a and b \n") ;


    scanf ( "%d %d",&a,&b) ;


    printf ( " The value of a is     %d \n ",a) ;


    printf ( " The value of b is    %d \n",b) ;


    a = a+b ;

    b = a-b ;

    a = a-b ;

    printf ( " The value a after swapping is %d \n",a) ;

    printf ( " The value a after swapping is %d \n",b) ;


   return 0 ;

 }
```

Output :

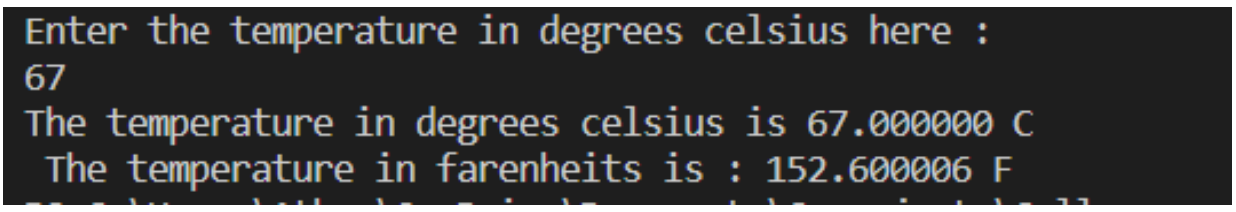
```
 Enter the value of a and b
8
6
  The value of a is   8
  The value of b is  6
 The value a after swapping is 6
 The value a after swapping is 8

Process returned 0 (0x0)   execution time : 4.121 s
Press any key to continue.
```

3) Convert temperature from degree celsius to degree fahrenheits

Input :

```
//Converting temperature from degree celsius to degree fahrenheits

#include <stdio.h>


int main () {


float c,f ;      // c stands for temperature in degree celsius,f stands for temperature in degree fahrenheits



printf ("Enter the temperature in degrees celsius here : \n") ;


scanf ("%f",&c) ;

printf ("The temperature in degrees celsius is %f C \n",c) ;

f = (9 * c /5) + 32 ;


printf (" The temperature in farenheits is : %f F",f) ;

return 0 ;

}
```

Output :

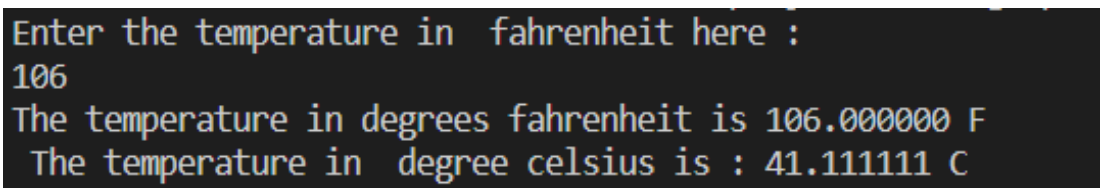


4) Convert temperature from degree fahrenheits to degree celsius

Input :

```
// Converting temperature from degree fahrenheit to degrees celsius

#include <stdio.h>


int main () {

float c,f ;   // c stands for temperature in degrees celsius while f stands for temperature in fahrenheit

printf ("Enter the temperature in  fahrenheit here : \n") ;

scanf ("%f",&f) ;

printf ("The temperature in degrees fahrenheit is %f F \n",f) ;

c = (f - 32) *5/9 ;

printf (" The temperature in  degree celsius is : %f C ",c) ;

return 0 ;

}
```

Output :



5) Calculate simple interest

Input :

```
// Calculating simple interest


#include <stdio.h>

int main () {

float p,r,t,s ; // p stands for principal amount in bank , r stands for rate of interest of the bank , t stands for time period in years s stands for simple interest


printf ( " Enter the principal amount in bank , rate of interest of the bank , time period in years \n") ;


scanf ( "%f %f %f",&p,&r,&t) ;



printf ( " The principal amount in bank is :Rs %f \n",p) ;

printf ( " The rate of interest of bank is : %f percent  \n",r) ;

printf ( " The time period is : %f years  \n",t) ;


s = p * r * t /100 ;


printf ( " The simple interest is %f years is Rs %f \n",t,s) ;


return 0 ;

}
```

Output :

```
Enter the principal amount in bank , rate of interest of the bank , time period in years
280000
6
9
The principal amount in bank is :Rs 280000.000000
The rate of interest of bank is : 6.000000 percent
The time period is : 9.000000 years
The simple interest is 9.000000 years is Rs 151200.000000
```

6) Calculate Volume of cylinder

Input :

```
// Calculate the volume of cylinder

# include <stdio.h>


int main () {

float h,r,v ;  /* h stands for height of cylinder while r stands for radius of base of cylinder v stands for volume of cylinder */

printf (" enter the  height of cylinder , radius of base of cylinder : \n") ;

scanf ( "%f %f ",&h,&r) ;

printf (" The  height of cylinder  : %f units \n",h) ;


printf (" The radius of base of cylinder :  %f units \n",r) ;

v = 3.14 * r * r * h ;

printf (" The volume of cylinder is : %f units \n",v) ;


return 0 ;

}
```

Output :

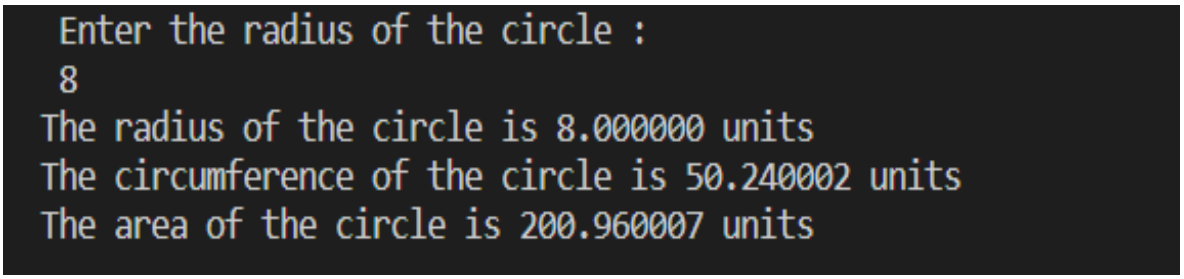
```
 enter the  height of cylinder , radius of base of cylinder :
8
9

 The  height of cylinder  : 8.000000 units
 The radius of base of cylinder :  9.000000 units
 The volume of cylinder is : 2034.719971 units
```

7) Calculate the area and circumference of a circle

Input:

```
//Calculate the area and circumference of a circle

#include <stdio.h>

Int main ( ) {

float r,c,a ;  // r stands for radius of the circle ,c stands for the circumference of the circle while a is the area of the circle

printf (“Enter the radius of the circle : \n”);

scanf (“%f,&r);

printf (“The radius of the circle is %f units \n”,r);

c = 2 * 3.14 * r ;

printf (“The circumference of the circle is %f units \n”,c);

a = 3.14 * r * r ;

printf (“The area of the circle is %f units \n”,a);

return 0 ;

}
```

Output :



8)Calculate the sum and average of four numbers (with decimal points)

Input :

```
 // Calculate the sum and average of four numbers

#include <stdio.h>

int main () {

float a,b,c,d,sum,average ;

printf (“ Enter your four numbers here  : \n” ) ;

scanf ( “%f%f%f%f”,&a,&b,&c,&d ) ;

printf (“ The four numbers are %f,%f,%f and %f \n”,a,b,c,d ) ;

sum = a + b + c + d ;

printf (“ The sum of the four numbers is %f \n”,sum ) ;

average = a * b * c * d /4 ;

printf (“ The average of the four numbers is %f \n”,average ) ;

return 0 ;

}
```

Output :

```
  Enter your four numbers here :
6
7
8
8

 The four numbers are 6.000000,7.000000,8.000000 and 8.000000
 The sum of the four numbers is 29.000000
 The average of the four numbers is 672.000000
```