

## Exercise - 2

### Simple programs using I/O statements

1. Write a program that converts Centigrade to Fahrenheit.

Expected Output:

Input a temperature (in Centigrade): 45  
113.000000 Fahrenheit.

2. Write a C program that calculates the volume of a sphere.

Expected Output:

Input the radius of the sphere : 2.56  
The volume of sphere is 70.28.

3. Write a C program that prints the perimeter of a rectangle to take its height and width as input.

Expected Output :

Input the height of the Rectangle : 5  
Input the width of the Rectangle : 7  
Perimeter of the Rectangle is : 24.000000

4. Write a C program that converts kilometers per hour to miles per hour.

Expected Output:

Input kilometers per hour: 15  
9.32 miles per hour

5. Write a C program that takes hours and minutes as input, and calculates the total number of minutes.

Expected Output:

Input hours: 5  
Input minutes: 37  
Total: 337 minutes

6. Write a program in C that takes minutes as input, and display the total number of hours and minutes.

Expected Output:

Input minutes: 546  
9 Hours, 6 Minutes

7. Write a program in C that reads a forename, surname and year of birth and display the names and the year one after another sequentially.

Expected Output:

Input your firstname: Tom

Input your lastname: Davis

Input your year of birth: 1982

Tom Davis 1982

8. Write a program in C to calculate the sum of three numbers with getting input in one line separated by a comma.

Expected Output:

Input three numbers separated by comma: 5,10,15

The sum of three numbers: 30

9. Write a C program to perform addition, subtraction, multiplication and division of two numbers.

Expected Output:

Input any two numbers separated by comma: 10,5

The sum of the given numbers: 15

The difference of the given numbers: 5

The product of the given numbers: 50

The quotient of the given numbers: 2.000000

10. Write a C program to find the third angle of a triangle if two angles are given.

Expected Output :

Input two angles of triangle separated by comma : 50,70

Third angle of the triangle : 60

11. Write a C program to input principle, time and rate (P, T, R) from user and find Simple Interest.

12. Write a C program to input principle (amount), time and rate (P, T, R) and find Compound Interest.

13. write a c program to swap two numbers.

14. Print the ASCII Value of the Character.

15. Write a program to input name, marks of 5 subjects of a student and display the name of the student, the total marks scored, percentage scored and the class of result.

16. Write a C Program to Display The Size of Different Data Types

17. C Program to Read Integer and Print First Three Powers ( $N^1$ ,  $N^2$ ,  $N^3$ )

18. C Program to Find Area And Circumference of Circle

19. Write a C program to enter any number and calculate its square root.

20. What will be the output of following program ?

```
#include <stdio.h>

void main(){
    unsigned char c=290;
    printf("%d",c);
}
```

```
#include <stdio.h>

int main(){
    float a=125.50;
    int b=125.50;
    char c='A';
    printf("%d,%d,%d\n",sizeof(a),sizeof(b),sizeof(125.50));
    printf("%d,%d\n",sizeof(c),sizeof(65));
    return 0;
}
```

```
#include <stdio.h>

int main(){
    int a,b,c;
    a=0x10; b=010;
    c=a+b;
    printf("\nAddition is= %d",c);
    return 0;
}
```

```
#include <stdio.h>

int main()
{
    int a=100;
    printf("%d\n"+1,a);
    printf("Value is = %d"+3,a);
    return 0;
}
```