1. Find the volume and surface area of a (a) cone and (b) sphere. Read necessary inputs from user e.g. radius of the sphere.
2. Farhan must pay a bill to a shopkeeper. The shopkeeper doesn’t have any change, so Farhan must have all the notes required to pay the bill. Write a C program that reads the bill and the number of each type of note (500, 100, 50, 20, 10, 5, 2, 1) from user and then output whether it is possible for Farhan to pay the bill or not. If it is possible, then also output the number of each notes required to pay the bill.

Sample Input/Output (bold ones are user inputs):

Enter amount: **1175**

Enter number of notes:

500: **1**

100: **7**

50: **1**

20: 0

10: 5

5: **1**

2: **0**

1: **0**

Farhan can pay the bill by using the following counts of different notes:

500: 1

100: 6

50: 1

20: 0

10: 2

5: 1

2: 0

1: 0

1. Write a C program that reads two complex numbers from user. Then compute and print the sum, difference, and product of these numbers.

Sample input/output – 1 (bold ones are inputs):

Enter Real part of first complex number: -**6**

Enter Imaginary part of first complex number: **5**

Enter Real part of second complex number: **2**

Enter Imaginary part of second complex number: **-7**

Sum = -4 - 2i

Difference = -8 + 12i

Product = 23 + 52i

1. Write a C program that reads the radius ***r*** of a circle and the side ***a*** of a square from user and then checks if that square can be placed inside that circle or not. Hint: Use Pythagorean theorem.
2. Write a C program to check whether an input number is a multiple of only 5 (e.g. 5, 10, 15, ...), only 11 (e.g. 11, 22, 33, ...), both 5 and 11 (e.g. 55, 110, ....), or neither of them (e.g. 2,3, 4, 6, 7, 8, 9, 12, ....).