Practice Problems:

1. **C Program to demonstrate change of values of a variable.**

```
#include<stdio.h>
#include<math.h>
void main()
{
      float a, b;
      printf("Enter a number:");

      b = a;
      a = a+1;

}
```

2. **C Program to compute squared root and cube of an input number.**

```
#include<stdio.h>
#include<math.h>
void main()
{
      float a;
      printf("Enter a number:");


}
```

3. **C program to print size of variables of different data types.**

```
#include<stdio.h>
void main()
{
    printf("size of char: %d", sizeof(char));
    //int
    //float
    //double
}
```

4. **C Program to convert a lowercase letter to uppercase:**

```
#include<stdio.h>
void main()
{
      char a;
      printf("enter a lowercase character:");
      scanf("%c",&a);

}
```

Try yourself: Write a program that converts an uppercase letter to lowercase.

5. **C program to print the last digit of a number and all the other digits of it:**

```
#include<stdio.h>
void main()
{
      int n;
      printf("Enter an integer: ");
      scanf("%d", &n);

      printf("last digit: %d", last);
      printf("\nOther digits: %d", others);
}
```

6. **C program to convert days to years weeks and days**

```
#include <stdio.h>
void main()
{
    int days, years, weeks;

     // Read total number of days (since the year 0 A.D.)
     printf("Enter days: ");
    scanf("%d", &days);

    // Converts days to years, weeks and days
    //Ignoring leap year

    printf("YEARS: %d\n", years);
    printf("WEEKS: %d\n", weeks);
    printf("DAYS: %d", days);
}
```

<u>Homework Questions:</u>

1. **Compute the value of $5x^3-4x^2+\sqrt{(x)}+3$; read x from user**
2. **Solve the equation: $ax^2+bx+c=0$ and print the solutions. Read a,b,c from user**
   Hint: compute the values of $(-b+sqrt(b^2-4ac))/2a$ and $(-b-sqrt(b^2-4ac))/2a$; here sqrt is a C function that computes the squared root of a number
3. **Find the volume of a (a) cube and (b) cylinder**
   Note: Read necessary inputs from user e.g. height and diameter of the cylinder for (a)
4. **Compute quotient and remainder when you divide x by y (read x, y from user). Also, compute quotient and remainder when you divide y by x. Print all these four results.**
5. **Read a temperature in Celsius and print its Fahrenheit equivalent (Hint: C=(F-32)*5/9)**
6. **Print the sum of the series:1+2+...+n; read n from user (Hint: 1+2+...+n= n(n-1)/2)**
7. **Print the sum of the series:$1^2+2^2+...+n^2$; read n from user.**