1. Given two numbers, Swap those two numbers without using temporary variable

Input:

Two integer values as input

Output:
num1= value
num2= value

CODE:

```
#include <stdio.h>
int main() {
   int num1, num2;
   printf("Enter the value of num1: ");
   scanf("%d", &num1);
   printf("Enter the value of num2: ");
   scanf("%d", &num2);
   num1 = num1 + num2;
   num2 = num1 - num2;
   num1 = num1 - num2;
   printf("After swapping:\n");
   printf("num1 = %d\n", num1);
   printf("num2 = %d\n", num2);
   return 0;
}
```

2. Calculate the number of years,weeks and the remaining days for the given total days

Input:

Any Integer

Output:
Number of Years:NO_OF_COMPLETE_YEARS
Number of Week:NO_OF_WEEKS_LEFTOUT
Number of Days:NO_OF_DAYS_LEFTOUT

CODE:

```
#include <stdio.h>
int main() {
   int totalDays;
   printf("Enter the total number of days: ");
   scanf("%d", &totalDays);
   int years = totalDays / 365;
   int weeks = (totalDays % 365) / 7;
   int remainingDays = (totalDays % 365) % 7;
   printf("Number of Years: %d\n", years);
   printf("Number of Weeks: %d\n", weeks);
   printf("Number of Days: %d\n", remainingDays);
```

```
 return 0;
}
```

3. Evaluate a polynomial of degree n.

Input:

Enter the degree of the polynomial: 3

Enter the coefficients: 2 -1 3 4

Enter the value of x: 2

Output:

P(2)

CODE:

```
#include<stdio.h>
double evaluatePolynomial(int degree, double coefficients[], double x) {
    double result = 0.0;
    for (int i = 0; i <= degree; i++) {
        result += coefficients[i] * pow(x, degree - i);
    }
    return result;
}
int main() {
    int degree;
    printf("Enter the degree of the polynomial: ");
    scanf("%d", &degree);
    double coefficients[degree + 1];
    printf("Enter the coefficients (from n to 0): ");
    for (int i = degree; i >= 0; i--) {
        scanf("%lf", &coefficients[i]);
    }
    double x;
    printf("Enter the value of x: ");
    scanf("%lf", &x);
    double result=evaluatePolynomial(degree, coefficients, x);
    printf("P(%lf)=%lf\n", x, result);
    return 0;
}
```