

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 num1:\n");
    scanf("%d", &num1);
    printf("Enter num2:\n");
    scanf("%d", &num2);

    num1 = num1 + num2;
    num2 = num1 - num2;
    num1 = num1 - num2;

    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, years, weeks, daysLeft;

    printf("Enter total days:\n");
    scanf("%d", &totalDays);

    years = totalDays / 365;
    weeks = (totalDays % 365) / 7;
    daysLeft = (totalDays % 365) % 7;

    printf("Number of Years: %d\n", years);
    printf("Number of Weeks: %d\n", weeks);
}
```

```
    printf("Number of Days: %d\n", daysLeft);

    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>

int main() {
    int degree, x;
    printf("Enter the degree of the polynomial: ");
    scanf("%d", &degree);

    int coefficients[degree + 1];
    printf("Enter the coefficients (from highest degree to constant term): ");
    for (int i = degree; i >= 0; i--) {
        scanf("%d", &coefficients[i]);
    }

    printf("Enter the value of x: ");
    scanf("%d", &x);

    int result = 0;
    for (int i = degree; i >= 0; i--) {
        result = result * x + coefficients[i];
    }

    printf("P(%d) = %d\n", x, result);

    return 0;
}
```