Quiz 1

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 first number: ");
   scanf("%d", &num1);
   printf("Enter the second number: ");
   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;
}
```

OUTPUT:

```
Enter the first number: 5
Enter the second number: 6
After swapping:
num1 = 6
num2 = 5
```

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 days = totalDays % 7;
    printf("Number of Years: %d\n", years);
    printf("Number of Weeks: %d\n", weeks);
    printf("Number of Days: %d\n", days);
    return 0;
}
```

OUTPUT:

```
Enter the total number of days: 857
Number of Years: 2
Number of Weeks: 18
Number of Days: 3
```

3. Evaluate a polynomial of degree n.

Input:

Enter the degree of the polynomial: 3

Enter the coefficients 2-134

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: ");
```

```
    for (int i = 0; i <= degree; i++) {
        scanf("%d", &coefficients[i]);
    }

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

    int result = 0;
    for (int i = 0; i <= degree; i++) {
        result += coefficients[i] * pow(x, i);
    }

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

    return 0;
}
```

OUTPUT:

```
Enter the degree of the polynomial: 3
Enter the coefficients: 2-1 3 4
Enter the value of x: 2
P(2) = 44
```