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

```
#include <stdio.h>
void swap(int a,int b)
{
       a = a+b;
       b = a-b;
       a = a-b;
       printf("AFTER SWAPPING:\n");
       printf("a = \%d b = \%d",a,b);
}
int main()
{
       int a,b;
       printf("Enter a:");
       scanf("%d",&a);
       printf("\nEnter b:");
       scanf("%d",&b);
       swap(a,b);
       return 0;
}
```

## Output

```
Enter a:99
Enter b:80
AFTER SWAPPING:
a = 80 b = 99
```

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

```
#include <stdio.h>
void calculate(int days)
{
    int year, week, rdays, weekdays = 7;
    //365 days in a year
    year = days / 365;
    week = (days % 365) / weekdays;
```

```
rdays = (days % 365) % weekdays;
       printf("Number of years = %d",year);
       printf("\nNumber of weeks = %d", week);
       printf("\nNumber of days = %d ",rdays);
}
int main()
{
       int days;
       printf("Enter number of days:");
       scanf("%d",&days);
       calculate(days);
       return 0;
}
Output
Enter number of days:670
Number of years = 1
Number of weeks = 43
Number of days = 4
3. Evaluate a polynomial of degree n.
#include <stdio.h>
void main()
{
  int array[10];
  int i, num;
  float x, polySum;
  printf("Enter the order of the polynomial \n");
  scanf("%d", &num);
  printf("Enter the value of x \in \mathbb{N}");
  scanf("%f", &x);
  printf("Enter %d coefficients \n", num + 1);
```

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

polySum = array[0];
for (i = 1; i <= num; i++)
{
    polySum = polySum * x + array[i];
}
printf("\n Sum of the polynomial = %.2f \n", polySum);
}</pre>
```

## Output

```
Enter the order of the polynomial

3
Enter the value of x

2
Enter 4 coefficients

2
-1

3

4
Sum of the polynomial = 22.00
```