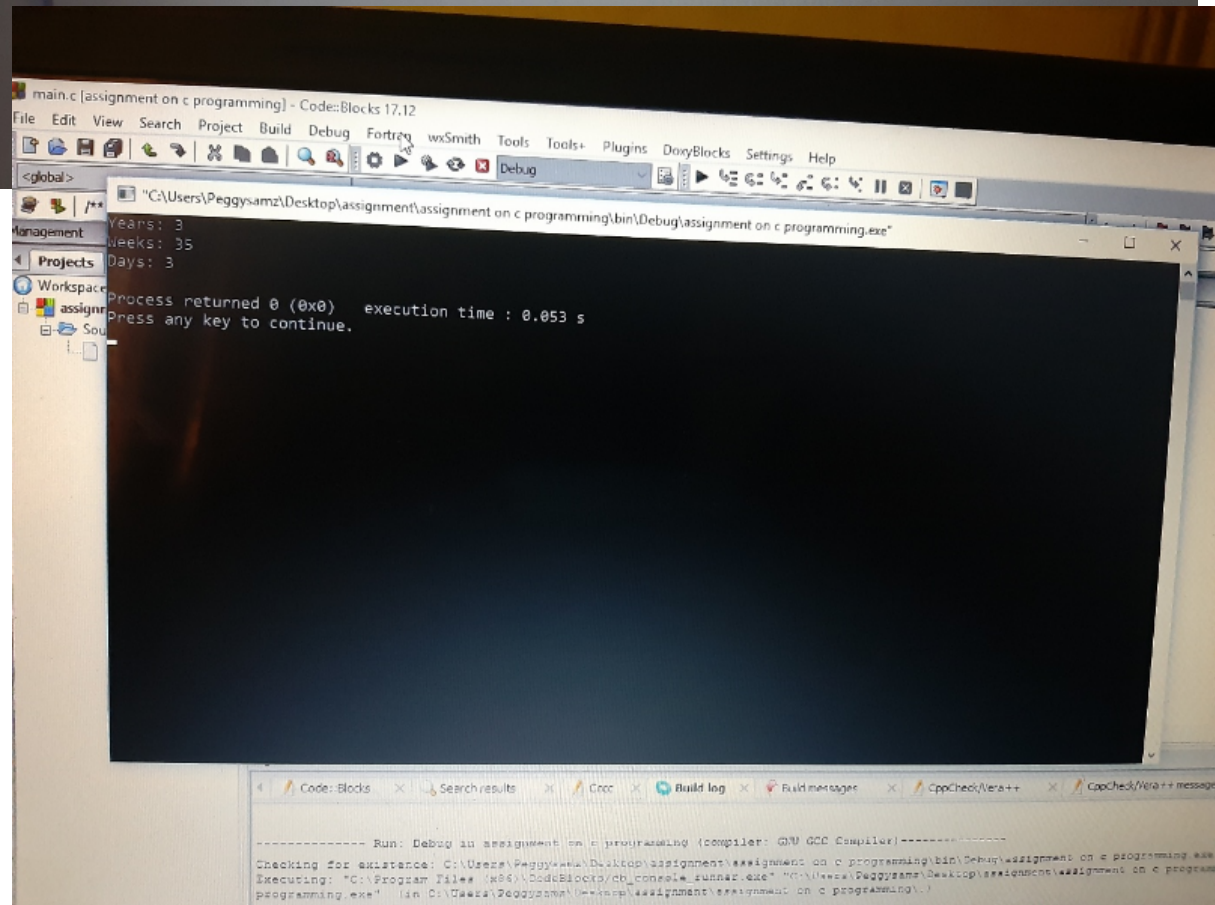


1. Write a C program to convert 1343 days into years, weeks and days(NoTE: Ignore leap year)

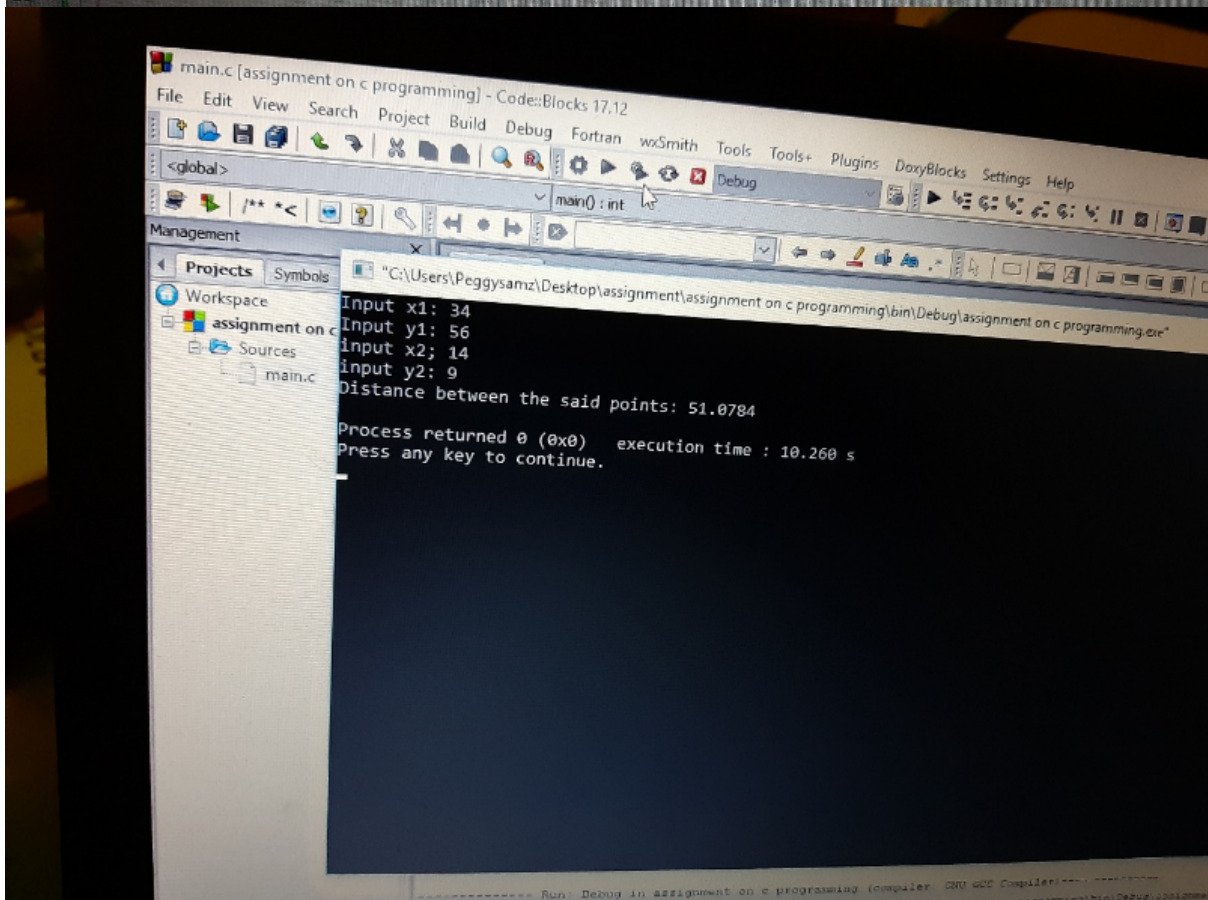
```
*main.c x
1  #include <stdio.h>
2  int main()
3  {
4      int days, years, weeks;
5
6      days= 1343 ;
7
8      // convert days to years, weeks and days
9      years = days/365;
10     weeks = (days % 365)/7;
11     days= days-((years*365) +(weeks*7));
12
13     printf( "Years: %d\n", years);
14     printf("Weeks: %d\n", weeks);
15     printf("Days: %d\n", days);
16
17     return 0;
18
19
20
```



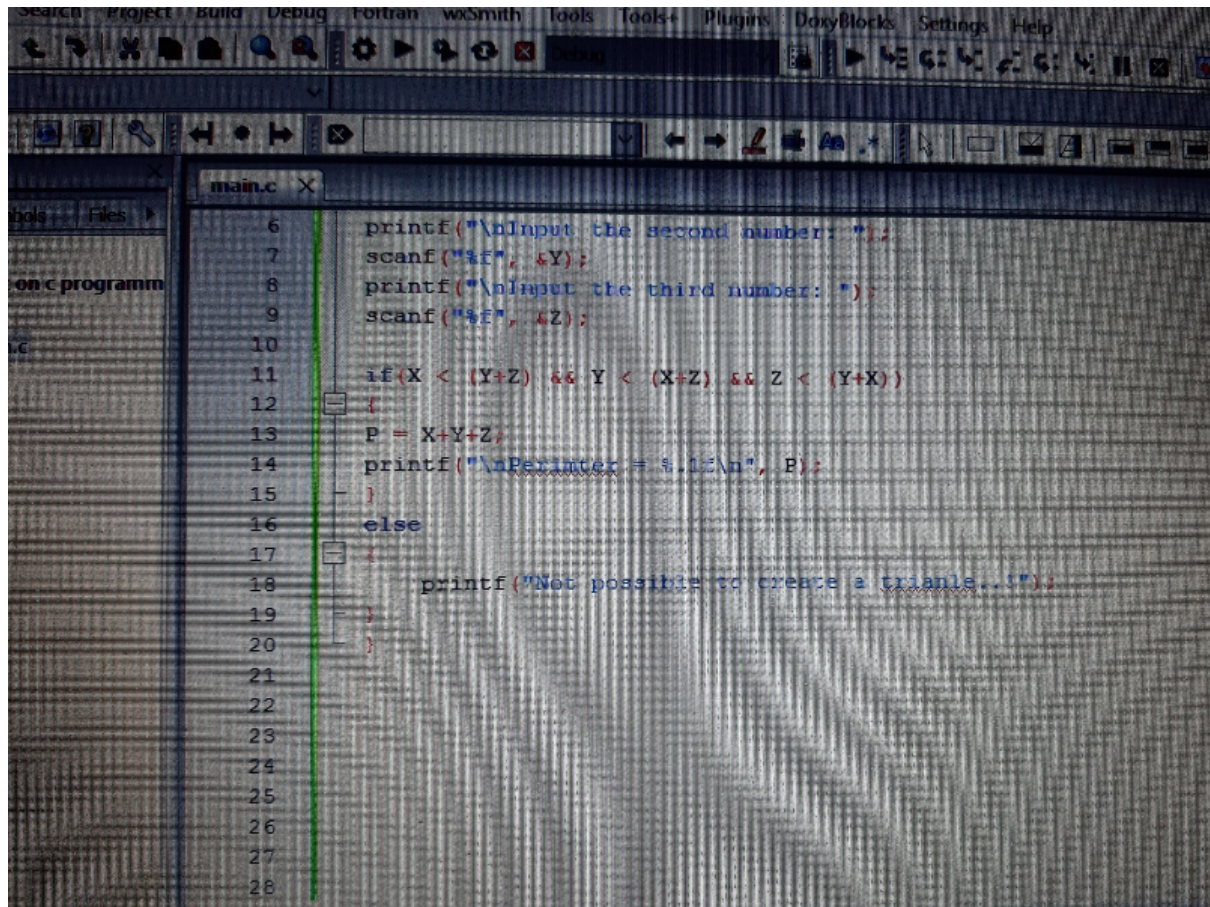
2. Write a C program to calculate the distance between the two points Note: x1 y1 x2 y2 are all double values

```
#include <stdio.h>
#include <math.h>

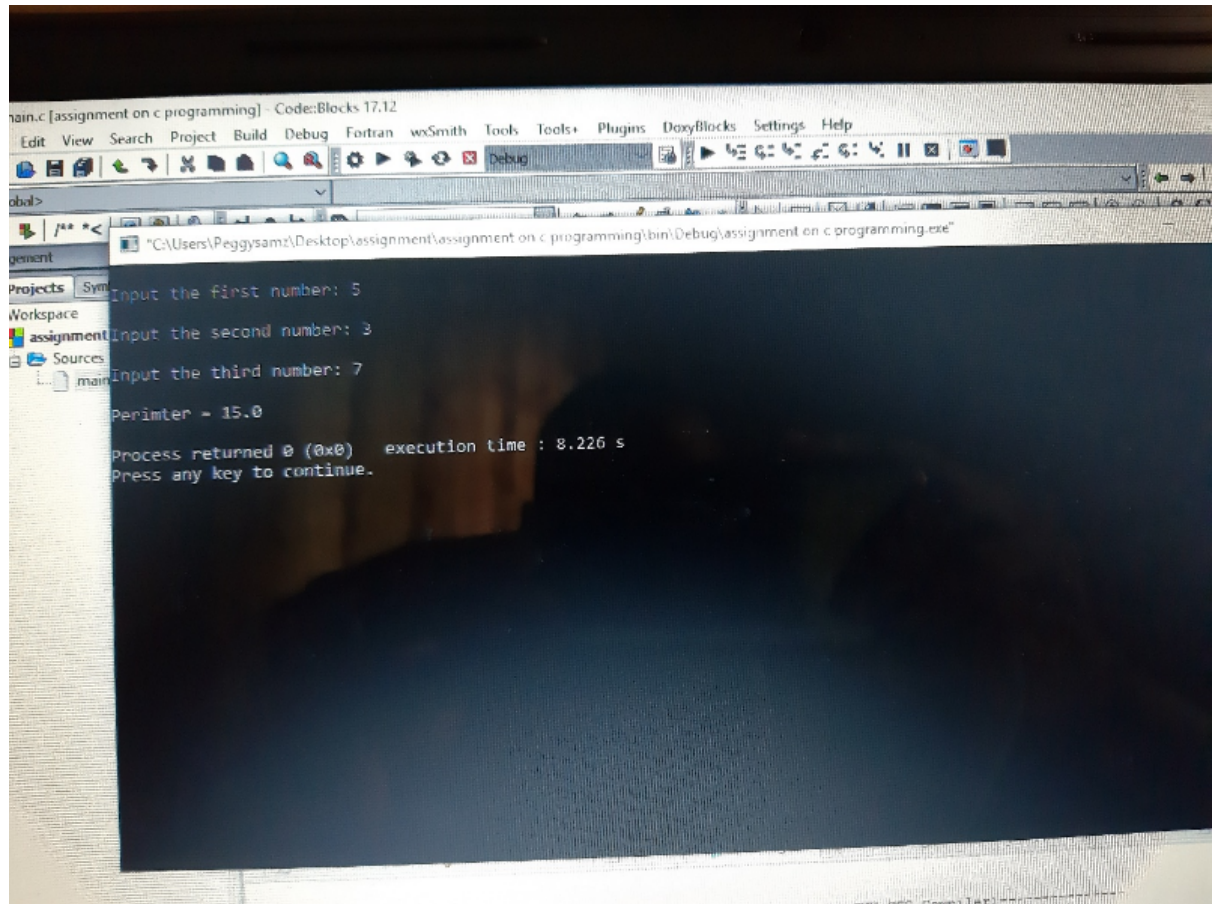
int main(
)
{float X1, Y1, X2, Y2, gdistance;
printf("Input X1: ");
scanf("%f", &X1);
printf("Input Y1: ");
scanf("%f", &Y1);
printf("Input X2: ");
scanf("%f", &X2);
printf("Input Y2: ");
scanf("%f", &Y2);
gdistance = ((X2-X1)*(X2-X1)+(Y2-Y1)*(Y2-Y1));
printf("Distance between the said point: %.4f", sqrt(gdistance));
printf("\n");
return 0;
}
```



3. Write a c program that reads three floating values and check if it is possible to make a triangle with them. Also calculate the perimeter of the triangle if the disk values are valid.



```
6 printf("\nInput the second number: ");
7 scanf("%f", &Y);
8 printf("\nInput the third number: ");
9 scanf("%f", &Z);
10
11 if(X < (Y+Z) && Y < (X+Z) && Z < (Y+X))
12 {
13     P = X+Y+Z;
14     printf("\nPerimeter = %.1f\n", P);
15 }
16 else
17 {
18     printf("Not possible to create a triangle..");
19 }
20 }
```



4. Write a C program to read age of 20 people and count total Baby age, School age and adult age.

```
1 #include <stdio.h>
2 int main() {
3
4     int age;
5     int cnt_baby=0, cnt_school=0, cnt_adult=0;
6     int count=0;
7     while(count<30)
8     {
9
10        printf("Enter age of person [%d]: ",count+1);
11        scanf("%d",&age);
12
13        if(age>=0 && age<=4)
14            cnt_baby++;
15        else if (age>=5 && age<=7)
16            cnt_school++;
17        else
18            cnt_adult++;
19
20        count++;
21    }
22    printf("Baby age: %d\n", cnt_baby);
23    printf("School age: %d\n", cnt_school);
24    printf("Adult age: %d\n", cnt_adult);
25    return 0;
26 }
27
```

```
C:\Users\Pragya\Documents\assignment\assignment\c\programming for school\assignment\program\age.c
Enter age of person [1]: 0
Enter age of person [2]: 1
Enter age of person [3]: 2
Enter age of person [4]: 4
Enter age of person [5]: 34
Enter age of person [6]: 67
Enter age of person [7]: 45
Enter age of person [8]: 43
Enter age of person [9]: 78
Enter age of person [10]: 67
Enter age of person [11]: 23
Enter age of person [12]: 14
Enter age of person [13]: 67
Enter age of person [14]: 89
Enter age of person [15]: 90
Enter age of person [16]: 2
Enter age of person [17]: 56
Enter age of person [18]: 78
Enter age of person [19]: 23
Enter age of person [20]: 56
baby age: 5
School age: 1
Adult age: 14

Process returned 0 (0x0)   execution time : 56.612 s
Press any key to continue.
```

5. write a c program to read a random number and then ask user to guess it from (0 to 100)

```
1  #include <stdio.h>
2  #include <stdlib.h>
3  #include <time.h>
4  int main()
5  {
6      int random_genNo=0, count=0, num;
7      int stime;
8      long ltime;
9
10     //initialise srand with current time, to get random number on every run
11     ltime = time(NULL);
12     stime=(unsigned) ltime/2;
13     srand (stime);
14
15     // generate random number
16     random_genNo=rand()%100;
17     //run infinite loop
18     while(1)
19     {
20
21         //increase counter
22         count+=1;
23         //read number from user
24         printf("\n\nGuess a number from (0 to 100): ");
25         scanf("%d" ,&num);
26         //compare entered number with generated number
27         if(random_genNo==num){
28             printf("congratulations, you have guessed a correct number.");
29             break;
30         }
31         else if(random_genNo<num){
```

```
32         printf("Generated number is less than entered number, try your luck again...");
33     }
34     else if(random_genNo>num){
35         printf("Generated number is greater than entered number, try your luck again...");
36     }
37     if(count==7){
38         printf("\n\n### maximum limit of attempt finished, BAD LUCK !!!\n");
39         break;
40     }
41 }
42
43 return 0;
44
45
46
47 }
```


C:\Users\Fegor\Documents> gcc -o guess.c guess.c -lm -std=c99

Guess a number from (0 to 100): 34
Generated number is greater than entered number, try your luck again...

Guess a number from (0 to 100): 98
Generated number is less than entered number, try your luck again...

Guess a number from (0 to 100): 86
Generated number is greater than entered number, try your luck again...

Guess a number from (0 to 100): 60
Generated number is greater than entered number, try your luck again...

Guess a number from (0 to 100): 56
Generated number is greater than entered number, try your luck again...

Guess a number from (0 to 100): 45
Generated number is greater than entered number, try your luck again...

Guess a number from (0 to 100): 56
Generated number is greater than entered number, try your luck again...

maximum limit of attempt finished, BAD LUCK !!!

Process returned 0 (0x0) execution time : 39.795 s
Press any key to continue.