

```
1 #include <stdio.h>
2 #define DAYSINWEEK 7
3
4 void main()
5 {
6     int ndays, year, week, days;
7
8     printf("Enter number of days\n");
9     scanf("%d",&ndays);
10    year= ndays / 365;
11    week=(ndays % 365) / DAYSINWEEK;
12    days=(ndays % 365)% DAYSINWEEK;
13    printf("%d is equivalent to %d years, %d weeks and %d days\n", ndays, year, week, days);
14
15    return 0;
16 }
17
18
```

Enter number of days

1343

1343 is equivalent to 3 years, 35 weeks and 3 days

Process returned 51 (0x33) execution time : 80.792 s

Press any key to continue.

```
1 #include <stdio.h>
2 #include <stdlib.h>
3
4 int main()
5 {
6     float x1, y1, x2, y2, gdistance;
7     printf("input x1: ");
8     scanf("%f", &x1);
9     printf("input y1: ");
10    scanf("%f", &y1);
11    printf("input x2: ");
12    scanf("%f", &x2);
13    printf("input y2: ");
14    scanf("%f", &y2);
15    gdistance = ((x2-x1)*(x2-x1))+((y2-y1)*(y2-y1));
16    printf("Distance between the said point: %.4f",sqrt(g));
17    printf("\n");
18    return 0;
19 }
20
21
```

```
input x1: 39
input y1: 12
input x2: 89
input y2: 78
Distance between the said point: 82.8010

Process returned 0 (0x0)   execution time : 8.585 s
Press any key to continue.
```

```
1 #include <stdio.h>
2 #include <stdlib.h>
3
4 int main()
5 {
6
7     float x, y, z, P, A;
8     printf("\ninput the first number x: ");
9     scanf("%f", &x);
10    printf("\ninput the second number y: ");
11    scanf("%f", &y);
12    printf("\ninput the third number z: ");
13    scanf("%f", &z);
14
15    if(x < (y+z) && y < (x+z) && z < (y+x))
16    {
17        P = x+y+z;
18        printf("\nPerimeter = %.1f\n", P);
19    }
20
21    else:
22    {
23
24        printf("Not possible to create a triangle!!!");
25    }
26
27    return 0;
28 }
29
```

input the first number x: 3

input the second number y: 5

input the third number z: 7

Perimeter = 15.0

Not possible to create a triangle!!!

Process returned 0 (0x0) execution time : 5.404 s

Press any key to continue.

```
1 #include <stdio.h>
2 #include <stdlib.h>
3
4 int main()
5 {
6
7     int age;
8     int cnt_baby=0,cnt_school=0,cnt_adult=0;
9     int count=0;
10
11     while(count<20)
12     {
13         printf("Enter age of person[%d]: ",count+1);
14         scanf("%d",&age);
15
16         if(age>=0&&age<=4)
17             cnt_baby++;
18         if(age>=5&&age<=17)
19             cnt_school++;
20         else
21             cnt_adult++;
22
23         count++;
24     }
25     printf("Baby age:%d\n",cnt_baby);
26     printf("School age:%d\n",cnt_school);
27     printf("Adult age:%d\n",cnt_adult);
28     return 0;
29 }
```

```
Enter age of person[1]: 56
Enter age of person[2]: 9
Enter age of person[3]: 0
Enter age of person[4]: 45
Enter age of person[5]: 3
Enter age of person[6]: 89
Enter age of person[7]: 12
Enter age of person[8]: 34
Enter age of person[9]: 14
Enter age of person[10]: 15
Enter age of person[11]: 56
Enter age of person[12]: 67
Enter age of person[13]: 8923
Enter age of person[14]: 5
Enter age of person[15]: 9
Enter age of person[16]: 45
Enter age of person[17]: 4
Enter age of person[18]: 89
Enter age of person[19]: 65
Enter age of person[20]: 2
Baby age:4
School age:6
Adult age:14
```

```
Process returned 0 (0x0)   execution time : 86.650 s
Press any key to continue.
```

```

1  #include <stdio.h>
2  #include <stdlib.h>
3  #include <time.h>
4
5  int main()
6  {
7      int random_genNo=0, count=0, num;
8      int shorttime;
9      long longtime;
10
11     longtime=time(NULL);
12     shorttime=(unsigned)time/2;
13     srand(shorttime);
14
15     //generates random number
16     random_genNo=rand()%100;
17
18     //run infinite loop
19     while(1)
20     {
21         //increase counter
22         count++;
23
24         //guess number from user
25         printf("\n\nGuess a number from (0 to 100):");
26         scanf("%d", &num);
27
28         //compare entered number with generated number
29

```

```

Guess a number from (0 to 100):89
Generate number is less than entered number, try your luck again...

Guess a number from (0 to 100):09
Generate number is greater than entered number, try your luck again...

Guess a number from (0 to 100):09
Generate number is greater than entered number, try your luck again...

Guess a number from (0 to 100):7
Generate number is greater than entered number, try your luck again...

Guess a number from (0 to 100):456
Generate number is less than entered number, try your luck again...

Guess a number from (0 to 100):2345
Generate number is less than entered number, try your luck again...

Guess a number from (0 to 100):8
Generate number is greater than entered number, try your luck again...

Maximum limit of attempt finished, GAME OVER FOR YOU!

Process returned 0 (0x0)   execution time : 16.794 s
Press any key to continue.

```

joys assignment

BASSEY JOY A

18/ENG01/004

CHEMICAL ENGINEERING

1).

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

```
#include<conio.h>
```

```
void main( )
```

```
{
```

```
int days ,yr,mo,wk,d;
```

```
printf("Enter the no of days");
```

```
scanf("%d",&days);
```

```
yr = days /365;
```

```
mo=(days /365)/30;
```

```
printf("Years= %d \t Months= %d \t Weeks =%d \t days = %d",yr,mo,wk,d);
```

```
// converts days to years, weeks and months
```

```
getch();
```

```
}
```

2).

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

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

```
int main() {
```

```
float x1, y1, x2, y2, distance;
```

```
printf("Input x1: ");
```

```
scanf("%f", &x1);
```

```
printf("Input y1: ");
```

```
scanf("%f", &y1);
```

```
printf("Input x2: ");
```

```
scanf("%f", &x2);
```

```

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 points: %.4f", sqrt(gdistance));
printf("\n");
return 0;
}

```

3).

```

int main() {
    float x, y, z, P, A;

    printf("\nInput the first number: ");
    scanf("%f", &x);
    printf("\nInput the second number: ");
    scanf("%f", &y);
    printf("\nInput the third number: ");
    scanf("%f", &z);

    if(x < (y+z) && y < (x+z) && z < (y+x))
    {
        P = x+y+z;
        printf("\nPerimeter = %.1f\n", P);
    }
    else

```

```

{
    printf("Not possible to create a triangle..!");
}

```

}

4)

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

```
int main()
```

```
{
    printf("Not possible to create a triangle..!");
}
}
4)
#include <stdio.h>
int main()
{
    int age;
    int cnt_baby=0, cnt_school=0, cnt_adult=0;
    int count=0;

    while(count<20)
    {
        printf("Enter age of person [%d]: ",count+1);
        scanf("%d",&age);

        if(age>=0 && age<=4)
            cnt_baby++;
        else if(age>=5 && age<=17)
            cnt_school++;
        else
            cnt_adult++;
        // increasing the number of years by 1
        count++;
    }

    printf("Baby age: %d\n",cnt_baby);
    printf("School age: %d\n",cnt_school);
```

```
    printf("Adult age: %d\n",cnt_adult);
    return 0;
}
5)
#include <stdio.h>
#include <stdlib.h>
#include <time.h>
```



```
    printf("Adult age: %d\n", cat_adult);  
    return 0;  
}
```

5)

```
#include <stdio.h>  
#include <stdlib.h>  
#include <time.h>
```

```
int main()
```

```
{
```

```
    int random_genNo=0,count=0,num;
```

```
    int shorttime;
```

```
    long longtime;
```

```
    longtime = time(NULL);
```

```
    shorttime = (unsigned) longtime/2;
```

```
    srand(shorttime);
```

```
    //generates random number
```

```
    random_genNo=rand()%100;
```

```
    //run infinite loop
```

```
    while(1)
```

```
    {
```

```
        //increase counter
```

```
        count+=1;
```

```
        //read number from user
```

```
    printf("\n\nGuess a number from (0 to 100): ");
```

```
    scanf("%d",&num);
```

```
    //compare entered number with generated number
```

```
    if(random_genNo==num){
```

```
        printf("Congratulations, you have guessed a correct number.");
```

```
        break;
```

```
random_genNo=rand()%100;

//run infinite loop
while(1)
{
    //increase counter
    count+=1;

    //read number from user

    printf("\n\nGuess a number from (0 to 100): ");
    scanf("%d",&num);

    //compare entered number with generated number

    if(random_genNo==num){
        printf("Congratulations, you have guessed a correct number.");
        break;
    }
    else if(random_genNo<num){
        printf("Generated number is less than entered number, try your luck again...");
    }
    else if(random_genNo>num){
        printf("Generated number is greater than entered number, try your luck again...");
    }

    if(count==7){
        printf("\n\nMaximum limit of attempt finished, GAME OVER FOR YOU!\n");
        break;
    }
}

return 0;
}
```

