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1) To convert 1343 to years, weeks and days.

```
 include <stdio.h>

int main()

{

int days, years, weeks;

days = 1329;

// Converts days to years, weeks and days

years = days/365;

weeks = (days % 365)/7;

days = days- ((years*365) + (weeks*7));

printf("Years: %d\n", years);

printf("Weeks: %d\n", weeks);

printf("Days: %d \n", days);

return 0;
```

2) Distance between two points

```
#include<stdio.h>

#include<math.h>
```

```
int main()

{

  int x1, y1, x2, y2, x, y, distance;

  // take first point's coordinates

  printf("Enter coordinates of first point: ");

  scanf("%d %d",&x1, &y1);

  // take second point's coordinates

  printf("Enter coordinates of second point: ");

  scanf("%d %d",&x2, &y2);

  x = (x2-x1);

  y = (y2-y1);

  distance = sqrt(x*x + y*y);

  // display result

  printf("Distance = %d", distance);

 return 0;
```

3) to read floating values and determine if its possible to make a triangle also calculating the perimeter of the triangle

```
#include <stdio.h>

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) to read the age of 20 people and count total baby age, school age and adult age.

```
#include <stdio.h>

{

  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 ++;
```

```
// increase counter
Count ++

}

Printf("Baby age: %d\n", cnt_baby);
Printf("school age: %d\n", cnt_school);
Printf("adult age: %d\n", cnt_adult):

Return o;
```

5) to read random numbers and ask a user to guess it from 0-100

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

int main()

{

 int random_genNo=0,count=0,num;
int stime;
long ltime;

   //initialise srand with current time, to get random number on every run

  ltime = time(NULL);

   stime = (unsigned) ltime/2;

 srand(stime);

   //generate random number

   random_genNo=rand()%1000;

  //run infinite loop

 while(1)
```

```
{
    //increase counter
    count+=1;
    //read number from user
    printf("\n\nGuess a number from (0 to 1000): ");
    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\n### Maximum limit of atttempt finished, BAD LUCK !!!\n");

            break;

        }

    }



    return 0;

}
```